



SECOR  
INTERNATIONAL  
INCORPORATED

www.secor.com

April 4, 2006  
**PN14BP.00177.10.0222**

City of Los Angeles Fire Department  
Environmental Unit - Underground Storage Tanks  
200 North Main Street, Room 1700  
Los Angeles, California 90012, California

**Re:   Underground Storage Tank Removal and Closure Report  
Request for No Further Action  
Former ARCO Facility 00177  
4371 Crenshaw Boulevard  
Los Angeles, California**

To Whom It May Concern:

On behalf of Atlantic Richfield Company (Atlantic Richfield), SECOR International Incorporated (SECOR) presents this Underground Storage Tank Removal and Closure Report for Former ARCO Facility 00177 located at 4371 Crenshaw Boulevard in Los Angeles, California (site, Figure 1). The site was sold to a third party and during re-development activities, an unidentified and undocumented 150-gallon underground storage tank (UST) was discovered at the site. Per Atlantic Richfield's request to remove the UST, SECOR conducted and coordinated field activities including Rule 1166 air monitoring, excavation and removal of the UST, soil sampling and analysis, remedial over-excavation, backfill and compaction, findings, and recommendations.

#### **SITE DESCRIPTION**

ARCO Facility 00177 is a former gasoline service station located on the western corner of the intersection of Crenshaw Boulevard and Vernon Avenue in, Los Angeles, California, (Figures 1 and 2). Properties adjacent to the site are primarily commercial and residential in nature. The site is currently under re-development.

## **SITE BACKGROUND**

Site assessment, monitoring, and remedial activity was conducted at the site between 1990 and 2004. Brief summaries of these activities are provided.

In March 1990, ENSR Consulting and Engineering (ENSR) performed a leak detection investigation in the vicinity of the three USTs. Three vadose monitoring wells (VW-2 through VW-4) were installed to a depth of 30 feet below ground surface (bgs) and one soil vapor extraction (SVE) well (VW-1) was installed at a depth of 40 feet bgs. Only one soil sample (VW4-20) had detectable concentrations of total volatile hydrocarbons (TVH) at 12.5 milligram per kilogram (mg/kg). Benzene was not reported at or above the laboratory method detection limits (LMDLs) in any of the soil samples analyzed (ENSR, 1990).

On November 1, 1991, EA Engineering, Science, and Technology (EA), performed a soil vapor containment assessment at 13 locations in the vicinities of the USTs and dispenser product piping. The maximum reported concentration of TVH was 353 parts per million (ppm), detected at five feet bgs, near the product piping between the dispenser islands (EA, 1991).

On June 18, 1992, EA performed a second leak detection investigation in the vicinity of the three USTs by drilling three soil borings to depths of 25 feet bgs. Three hand auger borings were attempted in the vicinity of the USTs. However, pea gravel encountered at these locations forced the abandonment of these borings. TVH and benzene were not reported at or above LMDLs in any of the soil samples analyzed from borings in the vicinity of the USTs. Six soil borings were advanced with a hand auger to a depth of five feet bgs in the vicinity of the product piping trench. Analytical results reported a maximum of 1,700 mg/kg TVH and 1.4 mg/kg benzene (EA, 1992).

On December 8, 1992, W.W. Irwin, Incorporated (Irwin) drilled one boring to a depth of 23 feet bgs in the vicinity of the proposed new UST location on the southeastern corner of the site. Analytical results reported gasoline range total petroleum hydrocarbons (TPHg) of 17,000 mg/kg were detected in soil sample collected at 21.5 feet bgs. Benzene was not detected at or above LMDLs (Irwin, 1992).

On December 9, 1992, Irwin supervised the abandonment of three vadose monitoring wells (VW-2, VW-3, and VW-4), and one vapor extraction well (VW-1), in preparation for the removal of the three existing USTs (Irwin, 1992).

On December 23, 1992, Irwin supervised the removal of three 12,000-gallon single walled fiberglass USTs. Four 10,000 gallon double walled USTs were installed in the southeast portion of the site. Twelve soil samples were collected from beneath the former USTs and product dispensers. Maximum concentrations of 330 mg/kg TPHg and 0.74 mg/kg benzene were detected (Irwin, 1993).

Between August 17 and 18, 1993, Irwin supervised the drilling of four borings, and subsequent installation of two vadose wells (VW-5 and VW-6). The objective was to assess the vertical and lateral extent of hydrocarbon impact in soil. Additionally, the vadose wells were installed for

future remedial activities. The maximum concentration of 1,296 mg/kg TPHg was reported in well VW-5 at 20 feet bgs. The maximum concentrations of 1.587 mg/kg benzene was reported in soil sample VW-5 at 25 feet bgs (Irwin, 1993).

Between March 6 and 15, 2001, SECOR supervised the removal of eight product dispensers, and associated product piping from the site during station upgrade activities. Analytical results for soil samples collected by SECOR from beneath the product dispenser's reported maximum concentrations of 1,300 mg/kg TPHg, 9.3 mg/kg benzene, 270 mg/kg methyl tertiary butyl ether (MTBE), and 14 mg/kg tertiary butyl alcohol (TBA). The product lines were subsequently replaced with new double-walled fiberglass product lines, the dispensers were replaced with new dispensers and spill containment, and the USTs were upgraded with new sumps, turbines, and fill ports (SECOR, 2001).

On December 26 and 27, 2002, SECOR supervised the drilling of four onsite soil borings at a 30-degree angle. Soil Vapor Extraction (SVE) well SVE-1 was installed onsite and west of the southern dispenser island at an angle of 30 degrees underneath the dispenser island and SVE well SVE-2 was installed north of the eastern dispenser island at an angle of 30 degrees underneath the dispenser island (SECOR, 2002).

From January 13 to February 26, 2003, ARCO Facility 00177 underwent decommissioning activities. Dispensers, and associated product piping, and four USTs were excavated and removed from the site. A total of six soil samples were collected from beneath the locations of the former product dispensers and product lines and eight soil samples were collected from beneath the locations of the former USTs. Analytical results for the six soil samples collected from beneath the product dispenser and product lines excavations reported TPHg concentrations above LMDLs in one of the six soil samples analyzed. Benzene and oxygenate concentrations were not detected at or above LMDLs in all six of the soil samples analyzed. Analytical results for the eight soil samples collected from beneath the UST excavation reported TPHg concentrations above LMDLs in two of the eight soil samples analyzed. MTBE concentrations were reported above LMDLs in four of the eight soil samples analyzed. TBA concentrations were detected in five of the eight soil samples analyzed. Benzene concentrations were reported as non-detectable at LMDLs in all eight of the soil samples analyzed (SECOR, 2003).

On September 9, 2004, the Los Angeles Regional Water Quality Control Board (LARWQCB) issued correspondence that no further action was required in relation to the UST release.

In November 2005, the site was under re-development when the undocumented 150-gallon UST was discovered. The following report documents UST removal activities that were conducted per Atlantic Richfield's request.

## **GEOLOGIC AND HYDROGEOLOGIC SETTING**

### **Regional Geology and Hydrogeology**

The site is located within the Coastal Plain of Los Angeles County. The subject property is underlain by alluvium and associated deposits of recent or Pleistocene age, consisting of approximately 180 feet of Recent and Late Pleistocene age stream channel and floodplain deposits. Near surface sediments beneath the site consist of recent alluvial deposits of sand silt, clay and gravel. The Recent alluvial deposits are underlain by the Pleistocene Lakewood Formation, which is comprised of marine and terrigenous sand, silt, gravel, and clay with localized shale pebbles.

The site is located in the West Coast Ground Water Basin. Localized semi-perched or perched ground water typically occurs within 50 feet of ground surface in the Recent sediments. The uppermost principle water bearing zone is the Gage Aquifer, which is located within the Lakewood Formation. In the vicinity of the site, the Gage Aquifer is approximately 25 feet thick, the top of which is located at approximately 150 feet bgs. The surface elevation rises west of the subject property towards Mount Vernon situated within a half mile west of the location (CDWR, 1961). Topography in the vicinity of the site slopes gently to the east-northeast (USGS, 1981).

### **RULE 1166 AIR MONITORING**

On November 16, 2005, SECOR notified the South Coast Air Quality Management District (SCAQMD) of the UST excavation activities and Reference Number 118586 was obtained. On November 17 & 18, 2005, SECOR, Contractor License Number 654498, conducted excavation and removal of the 150-gallon UST at the site in accordance with conditions of the SCAQMD Rule 1166 Contaminated Soil Mitigation Plan Number 450193, SECOR's I.D. 104203 (Appendix A). During soil excavation and handling, SECOR personnel monitored volatile organic compounds (VOC) concentrations using a Mini-Rae 2000 Photoionization detector (PID) calibrated to 100 parts per million (ppm) hexane. VOC concentrations were monitored approximately three-inches above the excavated soil in 15-minute intervals. During UST excavation activities, no PID readings above 50 ppm were detected.

Approximately 24 cubic yards (yd<sup>3</sup>) of soil was excavated during the removal of the 150-gallon UST. Recorded VOCs in soil excavated from around the UST fill port detected concentrations of 42.1 ppm and 49.3 ppm and was temporarily stockpiled onsite. The remaining soil excavated from above the UST had VOC concentrations ranging from 0.0 ppm to 1.9 ppm and was separately stockpiled. Over-excavated soil from beneath the UST had VOC concentrations ranging from 26.2 ppm to 49.1 ppm and was placed in Department of Transportation (DOT)-approved 55-gallon drums and temporarily stored on site.

**UST REMOVAL ACTIVITIES**

SECOR was contracted by Atlantic Richfield to obtain all required permit, make all necessary notifications, and to clean, remove, and transport one 150-gallon UST from the site. The following table summarizes information on the removal of the UST.

ACTIVITY	CONTRACTOR	ADDRESS	DOCUMENT LOCATION
Industrial Hygienist	Microanalytical Services Inc., Nancy Carraway, CIH	P.O. Box 60070 Pasadena, CA 91116	Appendix C
UST Rinseate Waste Manifest	Facility: DeMenno/Kerdoon	2000 North Alameda Street Compton, CA 90222	Appendix D
UST Disposal	Ecology Auto Parts	13780 E. Imperial Hwy Santa Fe Springs, CA 90670	Appendix E

On November 18, 2005, the UST was removed from the site by Belshire Environmental, Incorporated. The UST, which had visible holes, was filled with concrete and what appeared to be waste-oil or sludgy material. The following table summarizes pertinent information relating to the UST removal.

Number of Tanks	Removal Date	UL. No.	Tank Material	Capacity (gallons)	Age	Contents	Tank Condition
1	11/18/05	Unknown	Steel	~ 150	Unknown	Sludge, Concrete	Visible holes concrete-filled

**SOIL SAMPLING**

On November 18, 2005, qualified SECOR personnel collected soil samples from beneath the UST and from soil stockpiles generated during UST excavation. Soil sample W01-7.5 was collected directly beneath the UST at a depth of approximately 7.5 bgs. Stockpile soil sample SP-1 was collected from stockpiles generated while excavating soils above the UST. Soil sample locations are depicted in Figure 2.

## **REMEDIAL EXCAVATION**

After UST removal, it appeared that some of the soils below the UST were visibly darker. SECOR conducted remedial over-excavation of the potentially impacted soils and expanded the area of the excavation approximately three feet in each direction. All the soils excavated below the UST were stored in DOT-approved 55-gallon drums. SECOR removed approximately one yd<sup>3</sup> (four 55-gallon drums) of visibly impacted soil. After removing visibly darker soil from the vicinity of the former UST, SECOR collected confirmation soil samples. Soil sample W02-10 was collected at a depth of ten feet bgs, approximately three feet below the former UST and stockpile soil sample SP-2 was collected from the soil stockpile generated while excavating soils below the former UST (Figure 2). On December 15, 2005, Belshire Environmental, Incorporated transported the drums to TPS Technologies of Adelanto, California for recycling. Non-hazardous soils manifest is included as Appendix B.

## **SOIL ANALYTICAL DATA**

All soil samples collected were analyzed for the presence of (C<sub>4</sub> to C<sub>12</sub>) gasoline range organics (GRO); total recoverable petroleum hydrocarbons (TRPH); benzene, toluene, ethyl benzene, and xylenes (collectively BTEX), MTBE, and additional fuel oxygenates including; tert-Amyl Methyl Ether (TAME), Di-isopropyl Ether (DIPE), Ethyl tert-Butyl Ether (ETBE), TBA (collectively referred to as standard fuel oxygenates) and ethanol. Laboratory analysis for GRO was performed in accordance to Environmental Protection Agency (EPA) Method 8015 (modified). Laboratory analysis for BTEX, standard fuel oxygenates and ethanol were performed in accordance to EPA Method 8260B. Laboratory analysis for TRPH was performed by EPA 418.1.

## **SOIL SAMPLE ANALYTICAL RESULTS**

A total of four soil samples (W01-7.5, W02-10, SP-1 and SP-2) were collected following UST removal activities. Detectable concentrations of 2.8 J (J indicates estimated value) TRPH (W01-7.5) and 17,000 mg/kg TRPH (SP-2) were reported. Detectable concentrations of 0.07J mg/kg GRO (W01-7.5) and 190 mg/kg GRO (SP-2) were reported in soil samples analyzed. Benzene was detected at a concentration of 0.14 mg/kg (SP-2). No MTBE or fuel oxygenates were detected in any of the soil samples analyzed.

Analytical results did not indicate the presence of any petroleum hydrocarbon constituents in confirmation soil sample W01-10 and stockpile soil sample SP-1 at or above the LMDL. Soil analytical data is presented in Table 1. Certified analytical reports and chain-of-custody documentation are provided in Appendix F.

Due to the hydrocarbon impact detected in soil sample W01-7.5, collected from beneath the former UST and the impact detected in soil excavated from beneath the former UST, Atlantic Richfield submitted an unauthorized release report (URR) to the Los Angeles City Fire Department (LAFD) January 5, 2006. A copy of the URR is included as Appendix G.

## **SUMMARY OF BACKFILL COMPACTION**

After UST removal activities, SECOR backfilled the UST excavation with non-impacted soil from stockpile SP-1 and existing native soil. Soil compaction activities were conducted during backfilling of the UST cavity under the direction of Geotechnologies, Incorporated. Backfill and compaction field data is provided in Appendix H.

## **SUMMARY OF FINDINGS**

- Excavation and removal of an undocumented 150-gallon UST, and soil sampling activities were conducted on November 17 and 18, 2005.
- Analytical results for the soil sample collected directly beneath the UST detected minor petroleum hydrocarbon concentrations above the LMDL.
- Approximately one yd<sup>3</sup> (four-55-gallon drums, one-ton) of impacted soil was removed during over-excavation activities and transported by Belshire Environmental Incorporated to TPS Technologies Soil Recycling, an Atlantic Richfield approved, California State Certified disposal facility, in Adelanto, California, for recycling.
- Following remedial excavation of approximately one ton of soil, analytical results for confirmation soil samples did not indicate the presence of any petroleum hydrocarbon constituents at or above the LMDL.

## **CONCLUSIONS AND RECOMMENDATIONS**

Excavation and removal of an undocumented UST was conducted on November 17 and 18, 2005. Proper handling and disposal of the UST was conducted and documented. Soil samples were collected and analyzed from stockpiled soil excavated from above the UST (SP-1) and from soil at the base of the former UST (WO1-7.5). Remedial over-excavation was conducted, removing approximately one ton of soil from beneath and lateral to the former UST. Confirmation soil sample WO2-10, collected from approximately three feet beneath the former UST (10 feet bgs), detected no hydrocarbon impact to soil beneath the former UST.

Based on the well documented history of remedial activity conducted at the site and the analytical results of soil samples collected after remedial over-excavation, SECOR recommends no further action for the site and for site re-development activities to continue as planned.

## **LIMITATIONS**

All work was performed under the supervision of a Professional Geologist as defined in the Registered Geologist Act of the California Code of Regulations. The conclusions and recommendation contained in this report are based upon professional opinions with regard to the subject matter. These opinions have been arrived at in accordance with currently accepted hydrogeologic and engineering standards and practices applicable to this location and are subject to the following inherent limitations:

This report has been prepared for the exclusive use of Atlantic Richfield and its representatives as it pertains to the property located at 4371 Crenshaw Boulevard, Los Angeles, California. Evaluations of the geologic conditions at the site for the purpose of this investigation may be inherently limited due to the number of observation points. There are no representations, warranties, or guarantees that the points utilized for sampling are representative of the entire site. Data reported may reflect the conditions at specific locations at a specific point in time. The passage of time, manifestation of latent conditions, or occurrence of future events may require further exploration at the site, analysis of the data, and re-evaluation of the findings, observations, and conclusions in the report.

The data reported and the findings, observations, and conclusions expressed in the report are limited by the scope of the work and are based in part on information supplied by the client. The scope of the work was defined by the request of the client, the time and budgetary constraints imposed by the client, and availability of access to the site. The conclusions presented in this report are professional opinion based on data described on this report. They are intended only for the purpose, site location, and project indicated. This report is not a definitive study of contamination at the site and should not be interpreted as such.

This report presents professional opinions and finding of a scientific and technical nature. While attempts were made to relate the data and finding to applicable environmental laws and regulations, the report shall not be construed to offer legal opinion or representations as to the requirement of, nor compliance with, environmental laws, rules, regulations, or policies of federal, state, or local government agencies. Any use of this report constitutes acceptance of the limits of SECOR's liability. SECOR's liability extends only to its client and not to any other parties who may obtain this report. Issued raised by the report should be reviewed by appropriate legal counsel. No other interpretations, warranties, guarantees, expressed or implied, are included or intended in the contents of this report.

Because of the limitation stated above, the findings, observations, and conclusions expressed by SECOR in this report are not, nor should not be, considered an opinion concerning the compliance of any past or present owner or operator of the site with any federal, state, or local law or regulations. No warranty or guarantee, whether expressed or implied, is made with respect to the data reported of findings, observations, and conclusions that are based solely upon site conditions in existence at the time of the investigation.



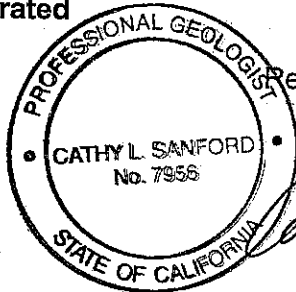
If you have any questions regarding the contents of this report, please call Ms. Cathy Sanford at (714) 230-0334.

Sincerely,  
**SECOR International Incorporated**


Prepared by:



Gabriel Touma  
Project Scientist



Reviewed and Approved by

  
Cathy L. Sanford, PG 7956  
Project Manager

Attachments: Figure 1 – Site Location Map  
Figure 2 – Site Map

Table 1 – Soil Analytical Data

Appendix A – SCAQMD Rule 1166 Notification Form and Mitigation Plan  
Appendix B – Non Hazardous Waste Manifest  
Appendix C – Hazardous Waste Tank Closure Certification  
Appendix D – UST Rinseate Waste Manifest  
Appendix E – UST Certificate of Destruction  
Appendix F – Certified Analytical Report and Chain-of-Custody Documentation  
Appendix G – Unauthorized Release Report  
Appendix H – Backfill and Compaction Field Data

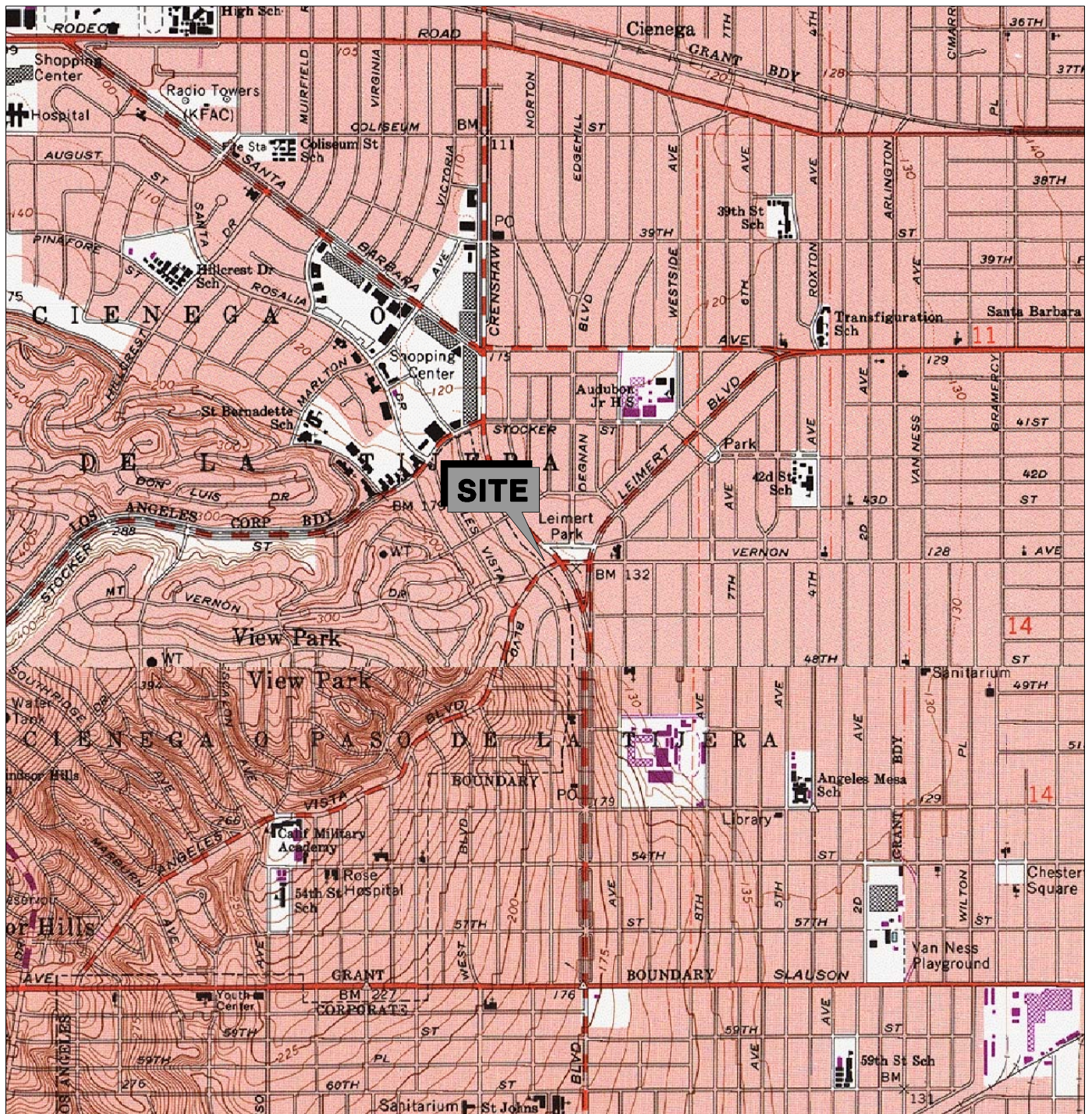
cc Ray Vose, Atlantic Richfield Company  
Daniel P. Dowdy, The Source Group Incorporated  
Aaron Swerdlow, Festival Development Partners, LLC

## REFERENCES

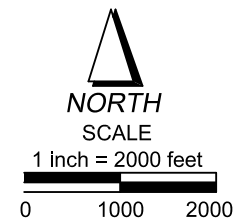
- California Department of Water Resources, Bulletin #104, June 1961, Reprinted May 1990, *Planned Utilization of the Ground Water Basins of the Coastal Plain of Los Angeles County*, Appendix A: Ground Water Geology.
- EA Engineering, Science, and Technology, Incorporated, November 1991, *Soil Vapor Contaminant Assessment*, ARCO Facility 0177, 4371 Crenshaw Boulevard, Los Angeles, California.
- EA Engineering, Science, and Technology, Incorporated, July 22, 1992, *Leak Detection Investigation II*, ARCO Facility 0177, 4371 Crenshaw Boulevard, Los Angeles, California.
- ENSR Consulting and Engineering, April 1990, *Leak Detention Investigation*, ARCO Facility # 0177, 4371 Crenshaw Boulevard, Los Angeles, California
- SECOR International Incorporated, May 9, 2001, *Site Fuel Line/Dispenser/Electrical/Vent Line Replacement Report*, ARCO Facility 0177, 4371 Crenshaw Boulevard, Los Angeles, California.
- SECOR International Incorporated, October 8, 2001, *Water Production Well Review*, ARCO Facility 0177, 4371 Crenshaw Boulevard, Los Angeles, California.
- SECOR International Incorporated, March 26, 2002, *Site Characterization Report*, Former ARCO Facility 0177, 4371 Crenshaw Boulevard, Los Angeles, California.
- SECOR International Incorporated, March 26, 2003, *Site Demolition and Underground Storage Tank Removal Report*, Former ARCO Facility 0177, 4371 Crenshaw Boulevard, Los Angeles, California.
- USGS Topographic Map-Hollywood Quadrangle (7.5 minute series), Photorevised 1981. United States Department of the Interior-Geological Survey.
- W. W. Irwin, Incorporated, December 15, 1992, *Predrill Boring Report*, ARCO Facility 01177, 4371 Crenshaw Boulevard, Los Angeles, California
- W. W. Irwin, Incorporated, December 21, 1992, *Well Abandonment Completion*, ARCO Facility 01177, 4371 Crenshaw Boulevard, Los Angeles, California
- W. W. Irwin, Incorporated, February 23, 1993, *Tank Replacement Investigation Report*, ARCO Facility 01177, 4371 Crenshaw Boulevard, Los Angeles, California
- W.W. Irwin, Incorporated, December 12, 1993. *Site Assessment Report*, ARCO Facility 0177, 4371 Crenshaw Boulevard, Los Angeles, California


## Figures



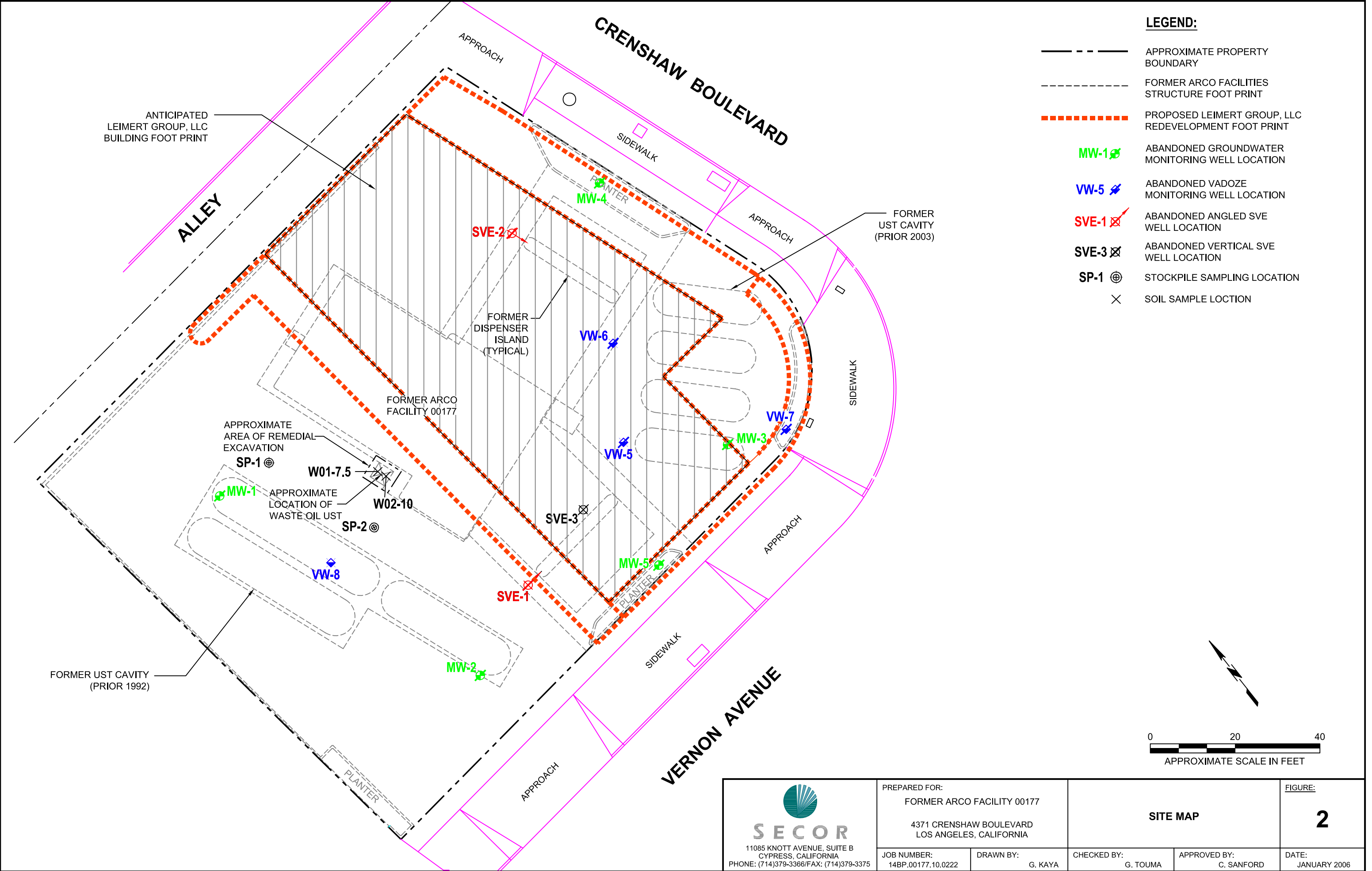



Reference: U.S.G.S., 1966, Torrance Quadrangle California – Los Angeles County, 7.5' Series (Topographic). Photorevised 1981.



 <b>SECOR</b> 11085 KNOTT AVENUE, SUITE B CYPRESS, CALIFORNIA PHONE: (714)379-3366/FAX: (714)379-3375	PREPARED FOR:  FORMER ARCO FACILITY 00177  4371 CRENSHAW BOULEVARD LOS ANGELES, CALIFORNIA		SITE LOCATION MAP		FIGURE:  1
	JOB NUMBER: 14BP.00177.08.0136	DRAWN BY: G. KAYA	CHECKED BY: G. TOUMA	APPROVED BY: C. SANFORD	DATE: JANUARY 2006





 <b>SECOR</b> 11085 KNOTT AVENUE, SUITE B CYPRESS, CALIFORNIA PHONE: (714)379-3366/FAX: (714)379-3375	PREPARED FOR:  FORMER ARCO FACILITY 00177   4371 CRENSHAW BOULEVARD LOS ANGELES, CALIFORNIA		SITE MAP		FIGURE:  2
	JOB NUMBER: 14BP.00177.10.0222	DRAWN BY:  G. KAYA			
		CHECKED BY:  G. TOUMA	APPROVED BY:  C. SANFORD	DATE:  JANUARY 2006	

## Tables

**Table 1**  
**Soil Analytical Data**  
**ARCO Facility 0177**  
**4371 Crenshaw Boulevard**  
**Los Angeles, California**

SAMPLE I.D.	SAMPLE DATE	SAMPLE DEPTH Feet bgs	TRPH mg/kg	GRO mg/kg	BENZENE mg/kg	ETHYBENZENE mg/kg	TOLUENE mg/kg	XYLENES mg/kg	MTBE mg/kg	DIPE mg/kg	ETBE mg/kg	TAME mg/kg	TBA mg/kg	ETHANOL mg/kg
WO1-7.5	11/17/2005	7.5	2.8J	0.077J	<0.0026	0.00069 J	0.0017	0.0041	<0.0042	<0.0042	<0.0042	<0.0042	<0.042	<0.25
WO2-10	11/18/2005	10	<5.0	<0.31	<0.0015	<0.0015	<0.0015	<0.0031	<0.0039	<0.0039	<0.0039	<0.0039	<0.039	<0.23
SP-1	11/18/2005	NA	NA	<0.32	<0.0016	<0.0016	<0.0016	<0.0031	<0.0039	<0.0039	<0.0039	<0.0039	<0.039	<0.23
SP-2	11/18/2005	NA	17,000	190	0.14	1.3	2.0	8.1	<0.21	<0.21	<0.21	<0.21	<4.1	<12.0

Notes:

GRO = Gasoline Range Organics C<sub>4</sub> to C<sub>12</sub>  
TRPH = Total Recoverable Petroleum Hydrocarbons  
MTBE = Methyl Tertiary Butyl Ether  
DIPE = Di-isopropyl Ether  
ETBE = Ethyl Tertiary Butyl Ether  
TAME = Tertiary Amyl Methyl Ether  
TBA = Tertiary Butanol

bgs = below ground surface  
NA = Not Analyzed/ Not Applicable  
mg/kg = milligrams per kilogram  
< 0.87 = below reporting limit and method detection limit  
J = estimated value (below laboratory reporting limit  
and above method detection limit)

## **APPENDIX A**

### **SCAQMD RULE 1166 NOTIFICATION FORM AND MITIGATION PLAN**





# COAST AIR QUALITY MANAGEMENT DISTRICT

## R1149 or R1166 NOTIFICATION FORM

Use this form to notify or known or suspect VOC storage tank Degassing and Excavation; Excavation, Handling, and Monitoring of known or suspect VOC contaminated soil; Mitigation/Treating of VOC contaminated soil; and VOC Vapor Extraction.

Fax this form to 809-396-3342 and within 48 hours mail the original and \$36.90 fee to:  
SCAQMD R1149/1166 Notifications, File # 55641, Los Angeles, CA 90074-5641

This form will be faxed back with a Reference number if you provide a FAXBACK #: **714 379 3375**

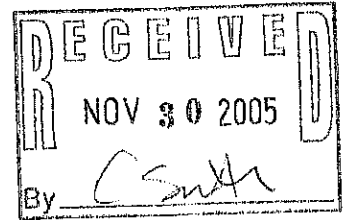
AQMD USE ONLY		RECEIVED <b>11-16-05</b>	POSTMARK	REFERENCE # <b>118586</b>
COMPLETED BY <b>Cathy Sanford</b>		Company <b>SECOR Lmtl Inc</b>		Phone # <b>714-379-3366</b>
Date <b>11/16/05</b>	Check #	Amount \$	Project # <b>14BP.00177.10</b>	
NOTIFICATION TYPE	<u>Original (Initial)</u>	Revision (prior reference #)	Cancellation (prior reference #)	
PROJECT TYPE	<u>R1166 Soil / Tank Excavation</u>	<u>R1149 Tank Degassing</u>	<u>Soil Vapor Extraction**</u>	<u>VOC Contaminated Soil Mitigation / Treating</u>
				<u>VOC Contaminated Soil Monitoring*</u>
* This information is required for these projects, ** Permit information is required for these projects			* For reporting VOC > 50 or 1000 ppm only	
Mitigation Plan issued to: <b>SECOR Lmtl Inc.</b>			Plan # <b>450197</b>	
Permit issued to:			Permit #	
			* Date & time of VOC exceedance	
			* Highest VOC reading in ppm	
PROJECT DATES		START <b>11/17/05</b>	END <b>11/24/05</b>	WORK SHIFT <u>(day)</u> swing, night
SITE CONTRACTOR INFORMATION		AQMD ID # <b>104283</b>	CSLB License # <b>654498</b>	Phone # <b>714 379 3365</b>
Name <b>SECOR Lmtl Inc</b>		Address <b>11085 Knott Ave #B</b>		
City <b>Cypress</b>		Zip <b>90630</b>	Site Supervisor/phone # <b>714-381-1707</b>	
SITE INFORMATION		Site Name <b>Former ARCO 177</b>	Site AQMD ID #	
Site Address <b>4371 Crenshaw Blvd.</b>		Cross Street <b>Vernon Avenue</b>		
City <b>Los Angeles</b>		Zip	Site Contact/phone # <b>714-585-0652</b>	
TANK INFORMATION	# OF TANKS	EACH	CAPACITY (gal)	MATERIAL STORED IN TANK
	<b>1</b>	<b>@</b>	<b>250</b>	<b>Waste oil</b>
		<b>@</b>		<b>No</b>
Example	3 tanks	@	10,000	Gasoline
ABOVE GROUND? (Y/N)				
EMERGENCY NOTIFICATIONS: Fax a copy of the order and give the reason, date, time, name and phone # of the person declaring the emergency.				
Reason:				
Date & time	Name/Title		Phone #	
INFORMATION CERTIFICATION I certify that the above information is complete and accurate				
Company Name <b>SECOR Lmtl Inc</b>		Print Name <b>Cathy Sanford</b>	Signature <b>Cathy Sanford</b>	Date <b>11/16/05</b>
COMMENTS				
** Distance to nearest sensitive receptor in feet:				

For questions, instructions, and Rules 1149 & 1166 can be obtained from AQMD website: <http://www.aqmd.gov>



# South Coast Air Quality Management District

21865 Copley Drive, Diamond Bar, CA 91765-4178  
(909) 396-2000 • www.aqmd.gov



PLAN ISSUE DATE

November 16, 2005

APPROVAL SIGNATURE

David Jones  
A.Q.A.C. Supervisor

COMPANY I.D.:

104203

Mitigation Plan/Application No.

450193

Applicant:

Secor International, Inc.  
11085 Knott Ave., Suite B  
Cypress, CA 90630

Attention:

Carlton Smith

Phone

(714) 379-3366

Fax (714) 379-3375

## VARIOUS LOCATIONS RULE 1166 CONTAMINATED SOIL MITIGATION PLAN

Reference is made to your application (A/N 450193) for the excavation and handling of VOC-contaminated soil at various locations within the South Coast Air Quality Management District.

In accordance with Rule 1166 (c), this approved plan is required prior to commencing excavation of any areas, sites, or locations which has previously been used to store or transfer volatile organic compounds (VOC) or during the excavation, handling, or storage of VOC-contaminated soils.

The rights and privileges granted through the issuance of this plan are restricted exclusively to the plan holder to whom it was issued, and are non-transferable, even with the written or expressed consent of the plan holder listed above.

A VARIOUS LOCATIONS PLAN can be used at a site to excavate and remove a maximum of 2000 cubic yards of VOC contaminated soil at the site. Any treatment or additional excavation of VOC contaminated soil at the site will require the issuance of a SITE SPECIFIC plan by the AQMD. Multiple use of VARIOUS LOCATIONS PLANS to excavate over 2000 cubic yards of contaminated soil for the same site is prohibited per Rule 1166.

This excavation and mitigation plan has been approved under the provisions of Rule 1166 of the Rules and Regulations of the AQMD and is subject to the following conditions.

**THIS PLAN WILL EXPIRE ONE YEAR FROM THE ISSUE DATE AND  
THERE IS NO AUTOMATIC RENEWAL PROCESS.**

**TO MAINTAIN A CURRENT PLAN AFTER THE EXPIRATION DATE, FILE AN APPLICATION FOR A NEW PLAN AT LEAST ONE MONTH PRIOR ITS EXPIRATION. CALL 909 396- 2682 OR E-MAIL [rvishwanath@aqmd.gov](mailto:rvishwanath@aqmd.gov) FOR AN APPLICATION PACKAGE AND CURRENT FEE INFORMATION.**

Plan #: 450193

## PLAN CONDITIONS

---

### SECTION I – GENERAL REQUIREMENTS

1. A SIGNED COPY OF THIS PLAN SHALL BE PRESENT AT EACH EXCAVATION SITE AT ALL TIMES AND SHALL BE MADE AVAILABLE TO AQMD PERSONNEL UPON REQUEST.
2. THIS PLAN IS NOT VALID FOR THE EXCAVATION OF VOC CONTAMINATED SOILS AT LANDFILLS OR SITES USED FOR DISPOSAL OF REFUSE OR OTHER TYPES OF WASTE.
3. THIS PLAN DOES NOT ALLOW THE TREATMENT OF VOC-CONTAMINATED SOIL BY THERMAL, CHEMICAL, OR MECHANICAL PROCESSES. ANY OF THE ABOVE TREATMENT PROCESSES REQUIRES A PERMIT TO OPERATE FROM THE AQMD AND A SITE-SPECIFIC RULE 1166 PLAN.
4. THIS PLAN DOES NOT ALLOW BACK-FILLING OF TREATED VOC CONTAMINATED SOIL. BACK-FILLING OF TREATED VOC CONTAMINATED SOIL MAY BE ALLOWED UNDER A SITE SPECIFIC RULE 1166 PLAN.
5. A). THE TOTAL QUANTITY OF VOC CONTAMINATED SOIL EXCAVATED AND HANDLED AT EACH SITE SHALL NOT EXCEED 2,000 CUBIC YARDS. THIS TOTAL INCLUDES ANY VOC CONTAMINATED SOILS EXCAVATED FROM THIS LOCATION UNDER A VARIOUS LOCATION PLAN WITHIN THE LAST TWELVE (12) CALENDAR MONTHS. EXCAVATIONS INVOLVING QUANTITIES IN EXCESS OF 2000 CUBIC YARDS OF VOC CONTAMINATED SOIL REQUIRES THE APPLICATION SUBMITTAL FOR A SITE SPECIFIC RULE 1166 EXCAVATION PLAN.
6. THE AQMD SHALL BE IMMEDIATELY NOTIFIED OF ANY COMPLAINTS RECEIVED AS A RESULT OF ACTIVITIES CONDUCTED UNDER THIS PLAN. SUCH NOTIFICATION SHALL INCLUDE THE NATURE OF THE COMPLAINT, NUMBER OF COMPLAINANTS AND THE ACTION TAKEN BY THE PLAN HOLDER TO MITIGATE THE SOURCE OF THE COMPLAINT.
7. DURING EACH STEP OF THE PROCESS UP TO AND INCLUDING THE REMOVAL AND DISPOSAL PROCESS, ALL PRECAUTIONS AND MEASURES SHALL BE TAKEN TO MINIMIZE THE RELEASE OF VOC, ODOR AND DUST. THIS INCLUDES BUT IS NOT LIMITED TO: THE USE OF ADDITIONAL PLASTIC SHEETING ON STOCKPILES, USE OF SUPPRESSANTS ON EXPOSED SOIL SURFACES & WORK AREAS AND MAINTAINING PAVED PUBLIC STREETS FREE OF SOIL DEPOSITS.
8. FOR THE PURPOSES OF RULE 1166 AND THIS PLAN, SOIL MEASURED PURSUANT TO RULE 1166 AS VOC CONTAMINATED SOIL, IS CONSIDERED AS VOC CONTAMINATED SOIL FROM THE TIME OF MEASUREMENT ONWARD, UNTIL THE SOIL IS TREATED PURSUANT TO AN APPROVED AQMD TREATMENT PROCESS.

## SECTION II - PRIOR TO EXCAVATION

9. AT LEAST 24 HOURS PRIOR TO COMMENCING EXCAVATION OR GRADING OF SOIL AT THE SITE, THE EXECUTIVE OFFICER OR DESIGNEE SHALL BE NOTIFIED OF THE EXCAVATION BY FAX USING A FORM APPROVED BY THE EXECUTIVE OFFICER WHICH IS FULLY COMPLETED AND INCLUDING, THE NAME OF THE COMPANY PERFORMING THE EXCAVATION, AND THE APPLICATION NUMBER LISTED ON THIS MITIGATION PLAN. THE NOTIFICATION SHALL BE MADE BY FAXING THE NOTIFICATION FORM AT (909) 396-3342. FAX NOTIFICATIONS WILL RECEIVE A REFERENCE NUMBER BY RETURN FAX OR CAN BE OBTAINED REFERENCING THE FAX NOTIFICATION BY PHONE TUESDAY THROUGH FRIDAY DURING BUSINESS HOURS AT 909 396-2326. THE REFERENCE NUMBER SHALL BE RETAINED AS PROOF OF COMPLIANCE WITH THIS REQUIREMENT.

REFERENCE NO: 118586

NOTIFICATION DATE: November 16, 2005

10. COMPLETE VERIFICATION INFORMATION IN CONDITION NO. 30 AND OBTAIN REQUIRED SIGNATURES, PRIOR TO COMMENCING EXCAVATION.

## SECTION III - MONITORING

11. DURING THE EXCAVATION PROCESS, AN ORGANIC VAPOR ANALYZER (OVA) SHALL BE ON SITE AT ALL TIMES. THE OVA SHALL BE MAINTAINED IN GOOD WORKING ORDER AT ALL TIMES AND SHALL BE CALIBRATED BY THE MANUFACTURER AT LEAST ONCE EVERY THREE MONTHS. THE CALIBRATION OF THE OVA SHALL BE VERIFIED USING CERTIFIED CALIBRATION GAS AT THE BEGINNING OF EACH WORKING DAY WITH THE PROCEDURES SPECIFIED BY THE MANUFACTURER. IF A CALIBRATION GAS OTHER THAN HEXANE IS USED, EACH MEASURED READING SHALL BE CORRELATED TO AND EXPRESSED AS HEXANE, USING EQUIVALENCY FACTORS PROVIDED BY THE MANUFACTURER.
12. ALL MONITORING SHALL BE CONDUCTED AT A DISTANCE NO MORE THAN 3 INCHES ABOVE THE SOIL SURFACE USING AN OVA DESCRIBED IN CONDITION NO. 11 ABOVE. **MONITORING SHALL BE CONDUCTED AT A MINIMUM FREQUENCY OF ONE READING FOR EVERY TWO CUBIC YARDS OF SOIL EXCAVATED, NOT TO EXCEED FIFTEEN MINUTES BETWEEN READINGS. ALL READINGS SHALL BE TAKEN NO LATER THAN THREE (3) MINUTES AFTER EACH LOAD OF SOIL IS EXCAVATED.**
13. ALL MONITORING SHALL BE CONDUCTED BY TRAINED PERSONNEL WHO ARE PROFICIENT IN THE USE OF THE HYDROCARBON MONITOR SELECTED FOR USE AT THIS SITE.
14. WRITTEN RECORDS OF OVA MONITORING AND CALIBRATIONS REQUIRED ABOVE SHALL BE KEPT IN A FORMAT APPROVED BY THE AQMD. THE APPROVED FORMAT IS INCLUDED ON PAGE 7 OF THIS PLAN. THE CERTIFICATION ON ALL RECORDS SHALL BE SIGNED AND DATED ON THE DAY THE MEASUREMENTS ARE OBSERVED.
15. UPON DETECTION OF VOC CONTAMINATED SOIL (READINGS 50 PPM OR GREATER), THE EXECUTIVE OFFICER OR DESIGNEE SHALL BE NOTIFIED **WITHIN 24 HOURS** OF THE FIRST DETECTION OF VOC CONTAMINATION. THE NOTIFICATION SHALL BE MADE BY FAXING THE NOTIFICATION FORM TO (909) 396-3342 OR CALLING (909) 396-2326. A REFERENCE NUMBER WILL BE FAXED BACK OR WILL BE ISSUED WHEN THE PHONE NOTIFICATION IS RECEIVED. ALL PHONE NOTIFICATIONS SHALL BE FOLLOWED BY MAILING THE NOTIFICATION FORM TO THE DISTRICT POSTMARKED **WITHIN 48 HOURS**. THE REFERENCE NUMBER WILL BE RETAINED AS PROOF OF COMPLIANCE WITH THIS REQUIREMENT.

REFERENCE NO: \_\_\_\_\_ NOTIFICATION DATE: \_\_\_\_\_

#### **SECTION IV – HANDLING AND STORAGE**

16. ALL VOC-CONTAMINATED SOIL BELOW 1000 PPM SHALL BE STOCKPILED, COVERED WITH PLASTIC SHEETING AND STORED SEPARATELY FROM NON-VOC-CONTAMINATED SOIL, OR IMMEDIATELY TRANSPORTED TO A TREATMENT FACILITY.
17. A STOCKPILE SHALL NOT CONTAIN MORE THAN 400 CUBIC YARDS OF SOIL.
18. IF THE OVA MEASUREMENT IS GREATER THAN 50 PPMV BUT LESS THAN 1000 PPMV
  - A) THE AFFECTED WORK AREA AND LOAD OF SOIL SHALL BE SPRAYED WITH WATER AND/OR APPROVED VAPOR SUPPRESSANT.
  - B) CONTAMINATED SOIL IN STOCKPILES SHALL BE COVERED WITH PLASTIC SHEETING WHICH OVERLAP A MINIMUM OF TWENTY-FOUR INCHES AND ARE SECURED SO THAT NO PORTION OF THE CONTAMINATED SOIL IS EXPOSED TO THE ATMOSPHERE. IN THE COURSE OF HANDLING THE STOCKPILE, ONLY THE WORKING FACE OF THE STOCKPILE MAY BE UNCOVERED.
19. IF THE OVA MEASUREMENT EQUALS OR IS GREATER THAN 1000 PPM, STOP EXCAVATION TO NOTIFY THE DISTRICT IMMEDIATELY OR WITHIN ONE HOUR OF DETECTION AND,
  - A) THE AFFECTED SOIL AND WORKING AREA SHALL BE IMMEDIATELY SPRAYED WITH WATER OR AN APPROVED VAPOR SUPPRESSANT, AND EITHER:
  - B) THE CONTAMINATED SOIL EXCAVATED SHALL BE IMMEDIATELY PLACED IN AQMD APPROVED SEALED CONTAINERS, OR,
  - C) DIRECTLY LOADED IN TRUCKS, SPRAYED WITH ADDITIONAL WATER OR APPROVED VAPOR SUPPRESSANT, COVERED, AND TRANSPORTED IMMEDIATELY OFF SITE AS PER CONDITION #25 OF THIS PLAN, OR,
  - D) OTHER ALTERNATIVE STORAGE METHODS WITH PRIOR WRITTEN APPROVAL FROM THE AQMD.
20. DURING EXCAVATION, THE ONLY EXPOSED VOC CONTAMINATED SOIL SHALL BE RESTRICTED TO THE IMMEDIATE WORKING AREA OF THE SITE OR STOCKPILE. ALL OTHER PORTIONS OF THE STOCKPILE SHALL BE COVERED WITH PLASTIC SHEETING, WITH SEAMS, WHICH OVERLAP A MINIMUM OF TWENTY-FOUR INCHES AND ARE SECURED WITH DUCT TAPE. ANY EXPOSED VOC-CONTAMINATED SOIL SURFACES (WORK FACE) SHALL BE KEPT MOIST WITH WATER OR OTHER APPROVED SUPPRESSANTS AT ALL TIMES, AND SHALL BE RE-COVERED DURING PERIODS OF INACTIVITY LONGER THAN ONE (1) HOUR. AT THE END OF EACH WORKING DAY, ALL STOCKPILES SHALL BE COMPLETELY COVERED AND SECURELY ANCHORED TO PREVENT ANY EXPOSURE OF SOIL TO THE ATMOSPHERE.
21. ONCE COVERED WITH PLASTIC SHEETING, STOCKPILES SHALL REMAIN UNDISTURBED UNTIL REMOVED FROM SITE.
22. DAILY INSPECTIONS SHALL BE CONDUCTED OF ALL COVERED VOC-CONTAMINATED STOCKPILES TO ENSURE THE INTEGRITY OF THE PLASTIC COVER. SUCH INSPECTIONS SHALL INCLUDE A VISUAL INSPECTION OF ALL SEAMS AND PLASTIC COVER SURFACES. ANY HOLES, TEARS OR ANY OTHER POTENTIAL SOURCES OF FUGITIVE VOC EMISSIONS SHALL BE REPAIRED IMMEDIATELY. DAILY RECORDS SHALL BE MAINTAINED TO ENSURE COMPLIANCE WITH THIS CONDITION.
23. VOC CONTAMINATED SOIL SHALL NOT BE SPREAD ON-SITE OR OFF-SITE. THIS INCLUDES ANY UNNECESSARY MOVEMENT OR AGITATION OF SOIL THAT MAY CAUSE THE UNCONTROLLED EVAPORATION OF VOC'S INTO THE ATMOSPHERE, INCLUDING THE RESHAPING OR RELOCATION OF STOCKPILES.

#### **SECTION V – SOIL REMOVAL AND DISPOSAL**

24. ALL EXCAVATED VOC-CONTAMINATED SOIL SHALL BE REMOVED FROM THE SITE WITHIN **THIRTY (30) DAYS** OF ITS EXCAVATION.
25. ALL VOC-CONTAMINATED SOIL REMOVED FROM THE SITE SHALL COMPLY WITH THE FOLLOWING:
  - A). BE TRANSPORTED TO AN APPROVED TREATMENT/DISPOSAL FACILITY. IT SHALL BE THE RESPONSIBILITY OF THE PLAN HOLDER TO ENSURE THAT THE RECEIVING TREATMENT/DISPOSAL FACILITY HAS RECEIVED APPROVAL FROM THE APPROPRIATE ENVIRONMENTAL OVERSIGHT AGENCIES TO HANDLE AND TREAT VOC CONTAMINATED SOILS.
  - B). WHEN LOADING IS COMPLETED AND DURING TRANSPORTATION, NO EXCAVATED MATERIAL SHALL EXTEND ABOVE THE SIDES OR REAR OF THE TRUCK OR TRAILER.
  - C). PRIOR TO COVERING/TARPING, LOADED CONTAMINATED SOIL SHALL BE WETTED BY SPRAYING WITH MIST INHIBITORS.
  - D). THE TRUCK OR TRAILER SHALL BE COMPLETELY COVERED/TARPED PRIOR TO LEAVING THE SITE TO PREVENT PARTICULATE EMISSIONS TO THE ATMOSPHERE.
  - E). THE EXTERIOR OF THE TRUCKS (INCLUDING THE TIRES) SHALL BE CLEANED OFF PRIOR TO THE TRUCKS LEAVING THE EXCAVATION SITE.

#### **SECTION VI - RECORDS AND REPORTING**

26. A WRITTEN REPORT SHALL BE PROVIDED TO THE AQMD WITHIN 30 DAYS OF INITIAL DETECTION OF CONTAMINATED SOIL, WHICH INCLUDES THE FOLLOWING INFORMATION.
  - A) THE STATUS OF THE EXCAVATION PIT, AND ANY VOC CONTAMINATED SOIL REMAINING ON SITE.
  - C) A BRIEF SUMMARY INDICATING IF ADDITIONAL CLEAN UP EFFORTS ARE NECESSARY, THE ADDITIONAL QUANTITY OF VOC CONTAMINATED SOILS TO BE EXCAVATED AND THE PROJECTED SCHEDULE OF THE EXCAVATION.
27. RECORDS OF DISPOSAL SHALL BE MAINTAINED FOR ALL VOC-CONTAMINATED SOIL REMOVED FROM THIS SITE. SUCH RECORDS SHALL BE CLEARLY LABELED “**SCAQMD RULE 1166-VOC CONTAMINATED SOIL**” AND SHALL INCLUDE THE IDENTIFICATION AND THE LOCATION OF, 1) THE GENERATOR, 2) TRANSPORTER AND 3) RECEIVING FACILITY. IN ADDITION, SUCH RECORDS SHALL BE SIGNED AND DATED BY EACH OF THE ABOVE PARTIES INDICATING RECEIPT OR RELINQUISHMENT OF THE VOC-CONTAMINATED SOIL AT THE TIME CUSTODY IS TRANSFERRED.
28. RECORDS OF DISPOSAL OF VOC-CONTAMINATED SOIL SHALL BE MAINTAINED ON SITE DURING THE EXCAVATION AND LATER MAINTAINED FOR A PERIOD OF TWO (2) YEARS. THE RECORDS SHALL BE MADE AVAILABLE TO AQMD PERSONNEL UPON REQUEST.
29. WITHIN **THIRTY (30) DAYS** AFTER THE EXCAVATION AT THE SITE IS COMPLETED, THE WRITTEN RECORDS UNDER CONDITIONS NO. 14, 22, AND 27 SHALL BE SUBMITTED TO THE AQMD AT THE FOLLOWING ADDRESS.

SOUTH COAST AIR QUALITY MGMT DISTRICT  
ENGINEERING & COMPLIANCE DIVISION  
TOXICS & WASTE MANAGEMENT UNIT  
(RULE 1166 COMPLIANCE)  
21865 E. COPLEY DR.  
DIAMOND BAR, CA. 91765-4182

## SECTION VII – VERIFICATION AND SIGNATURE

30. THIS PLAN IS NOT VALID UNTIL ALL PARTIES HAVE REVIEWED AND SIGNED THE VERIFICATION STATEMENT BELOW.

Site Name <b>Former ARCO 00177</b>		Type of Business <b>Former gasoline service station</b>	
Address <b>4371 Crenshaw Blvd.</b>	City <b>Los Angeles</b>	Zip <b>90008</b>	
Responsible Party (Owner/Operator) <b>Atlantic Richfield Company</b>		Phone <b>714 330 1706</b>	
Address <b>6 Centerpointe Drive</b>	City <b>La Palma</b>	Zip <b>90623</b>	

I CERTIFY THAT I HAVE REVIEWED AND UNDERSTAND THE CONDITIONS CONTAINED WITHIN THIS PLAN. IN SIGNING BELOW, I ACKNOWLEDGE THAT UNDER THE PROVISIONS OF RULE 1166, I CAN BE HELD RESPONSIBLE FOR THE REQUIREMENTS SET FORTH IN THIS PLAN.

Responsible Party <b>Atlantic Richfield Company</b>	Responsible Party Signature <i>[Signature]</i>	Date Signed <b>11/16/05</b>
General Contractor <b>SECOR Lmtl Inc</b>	General Contractor Signature <i>[Signature]</i>	Date Signed <b>11/16/05</b>
Excavation Contractor <b>SECOR Lmtl Inc</b>	Excavation Contractor Signature <i>[Signature]</i>	Date Signed <b>11/16/05</b>
Environmental Consultant <b>SECOR Lmtl Inc.</b>	Environmental Consultant Signature <i>[Signature]</i>	Date Signed <b>11/16/05</b>

## DEFINITIONS

### Excavation

Is the process of digging out and removing materials including any material necessary to that process such as the digging out and removal of asphalt or concrete necessary to expose, dig out and remove known VOC contaminated soil.

### Organic Vapor Analyzer (OVA)

For the purposes of this plan, an OVA is an hydrocarbon monitor utilizing flame ionization, photo ionization or other analytical methods complying with 40 CFR PART 60 APPENDIX A, EPA METHOD 21 SECTION 3, "DETERMINATION OF VOLATILE ORGANIC COMPOUND LEAKS, MONITORING INSTRUMENT SPECIFICATIONS. The monitor shall be capable of being calibrated using hexane at a range of 0 parts per million by volume (PPMV) to 50 PPMV, and at a detection range of at least 30 PPMV to 1100 PPMV

### Responsible Party

For the purposes of this plan, Responsible Party is the party financially responsible for initiating the excavation. This may include the property owner or the tank operator. This excludes contractors working for the property owner or operator, and any other party that lacks the direct authority to immediately treat all VOC contaminated soils generated at the excavation site.

### VOC Contaminated Soil

Is soil that registers a concentration of 50 PPM or greater of volatile organic compounds as measured before suppression materials have been applied and at a distance of no more than three inches from the surface of the excavated soil with an organic vapor analyzer calibrated with hexane.

### Volatile Organic Compound (VOC)

Is any volatile compound of carbon, excluding methane, carbon monoxide, carbon dioxide, carbonic acid, metallic carbides or carbonates, ammonium carbonate, and exempt compounds. Exempt compounds areas defined in Rule 102 – Definitions of Terms.

Once issued, this plan is subject to further review by the AQMD and may be revoked if excavation activities are found in violation of plan conditions or AQMD's Rules and Regulations. Failure to comply with one or more of the conditions contained within this plan constitutes a violation of Rules 221 and 1166.

Other governmental agencies may require approval before any excavation begins. It shall be the responsibility of the applicant to obtain that approval. The South Coast Air Quality Management District shall not be responsible or liable for any losses because of measures required or taken pursuant to the requirements of this approved Rule 1166 Contaminated Soil Mitigation Plan.

Questions regarding this plan should be directed to Ranjit Vishwanath at (909) 396-2682.

Rv11/17/04



# Rule 1166 Soil Monitoring Records

SECOR INTERNATIONAL INC. 11085 KNOTT AVE SUITE B CYPRESS, CA 90630		Facility / Site Information	
ID # <u>104230</u> PLAN # <u>450193</u>		Name: ARCO FACILITY 177	
Reference No(s): <u>118586</u>		Address: 4371 Crenshaw Boulevard	
City: Los Angeles		Zip: 90008	

Monitor Information	Calibration Data	Monitoring Personnel	Excavation Summary (Upon completion of each page)					
			Soil			Pea Gravel	Concrete/ Asphalt	
			0-50	50-1000	> 1000			
Brand: Mini Rae	Gas: Hexane	Name: <u>GABE</u>	Total Cubic Yds (This page)	<u>14</u>				
Model: PGM 7600	Date: <u>11/17/05</u>	Company: SECOR	Total Cubic Yds (To date)	<u>1014</u>				
Type: PID	By: <u>Paul N.</u>	Phone: (714) 379-3366	Removed from Site (To date)	<u>0</u>				

Time Every 15 min.	VOC Concentration (PPMV) @ Excavated Load			Comment	Time Every 15 min.	VOC Concentration (PPMV) @ Excavated Load			Comment
	Reading	Hexane Factor	Adjusted Reading			Reading	Hexane Factor	Adjusted Reading	
1315	42.1			Remedy bill for 25% ↓					
1330	49.3								
1345	0.0			SOIL CUST					
1400	0.0								
1415	0.0								
1430	0.0								
1445	0.0								
1500	0.0								
1515	0.0								
1530	0.0								
	<u>26.4</u> <u>CV</u>								

I certify that the information contained in the above document is true and correct. I further certify that the above listed hydrocarbon monitor was operated in a manner consistent with the manufacturer's specifications and the conditions specified in this plan. I certify that the above readings represent the actual measurements I observed and recorded during the excavation process.

SIGNATURE:       DATE: 11/17/05

## Rule 1166 Soil Monitoring Records

SECOR INTERNATIONAL INC. 11085 KNOTT AVE SUITE B CYPRESS, CA 90630	Facility / Site Information		
ID # 104230      PLAN # 450193	Name: ARCO FACILITY 177		
Reference No(s): 11858C	Address: 4371 Crenshaw Boulevard		
	City: Los Angeles	Zip:	90008

Monitor Information	Calibration Data	Monitoring Personnel	Excavation Summary (Upon completion of each page)					
				Soil			Pea Gravel	Concrete/ Asphalt
				0-50	50-1000	> 1000		
Brand: Mini Rae	Gas: <i>100 ppm</i> Hexane	Name: <i>ERIK</i>	Total Cubic Yds (This page)	<i>10.</i>				
Model: PGM 7600	Date: <i>11/18/05</i>	Company: SECOR	Total Cubic Yds (To date)	<i>24</i>	<i>0.0</i>			
Type: PID	By: <i>E. Goff</i>	Phone: (714) 379-3366	Removed from Site (To date)					

[illegible]

I certify that the information contained in the above document is true and correct. I further certify that the above listed hydrocarbon monitor was operated in a manner consistent with the manufacturer's specifications and the conditions specified in this plan. I certify that the above readings represent the actual measurements I observed and recorded during the excavation process.

SIGNATURE:

E-62. *sp*

DATE:

11 / 18 / 05

**APPENDIX B**

**NON-HAZARDOUS WASTE MANIFEST**

# Manifest

## TPS Technologies Soil Recycling

\* Non-Hazardous Soils

# Manifest

Date of Shipment: **12/18/05** Responsible for Payment: **BESI** Transporter Truck #: **707-1773** Facility #: **07** Given By TPS: **26092** Load #: **01011**

Generator's Name and Billing Address: **WEST COAST PRODUCTS LLC**  
**P.O. BOX 80249**  
**RANCHO SANTA MARGARITA, CA 92688**  
 Generator's Phone #: \_\_\_\_\_  
 Person to Contact: \_\_\_\_\_  
 FAX#: \_\_\_\_\_  
 Generator's US EPA ID No.: \_\_\_\_\_  
 Customer Account Number with TPS: \_\_\_\_\_

Consultant's Name and Billing Address: \_\_\_\_\_  
 Consultant's Phone #: \_\_\_\_\_  
 Person to Contact: \_\_\_\_\_  
 FAX#: \_\_\_\_\_  
 Customer Account Number with TPS: \_\_\_\_\_

Generation Site (transport from): (name & address)  
**ARCO #0177**  
**4371 CRENSHAW BLVD.**  
**LOS ANGELES, CA**  
 Site Phone #: \_\_\_\_\_  
 Person to Contact: \_\_\_\_\_  
 FAX#: \_\_\_\_\_  
 BTEX Levels: \_\_\_\_\_  
 TPH Levels: \_\_\_\_\_  
 AVG. Levels: \_\_\_\_\_

Designated Facility (name & address)  
**TPS TECHNOLOGIES, INC.**  
**12328 HIRSHCUS AVENUE**  
**ADELANTO, CA 92301**  
 Facility Phone #: **805-852-8001**  
 Person to Contact: \_\_\_\_\_  
 Facility Permit Numbers: **750-245-8004**

Transporter (name & address)  
**ECO-STAR ENVIRONMENTAL**  
**25422 TRABUCO ROAD #105-269**  
**LAKE FOREST, CA 92630**  
 Transporter Phone #: **949-450-1177**  
 Person to Contact: **Larry Macchert**  
 Transporter's DOT No.: **450847**  
 Customer Account Number with TPS: **120413**

Description of Soil	Moisture Content	Contaminated by:	Approx. Qty.	Description of Delivery	Gross Weight	Tare Weight	Net Weight
Solid <input type="checkbox"/> Organic <input type="checkbox"/> Clay <input type="checkbox"/> Other <input type="checkbox"/>	0-10% <input type="checkbox"/> 10-20% <input type="checkbox"/> 20% - over <input type="checkbox"/>	Gas <input type="checkbox"/> Diesel <input type="checkbox"/> Other <input type="checkbox"/>	4 DMS		4420	2420	2000
Sand <input type="checkbox"/> Organic <input type="checkbox"/> Clay <input type="checkbox"/> Other <input type="checkbox"/>	0-10% <input type="checkbox"/> 10-20% <input type="checkbox"/> 20% - over <input type="checkbox"/>	Gas <input type="checkbox"/> Diesel <input type="checkbox"/> Other <input type="checkbox"/>					10

Make any exception to items listed above: **28940**

Generator's and/or consultant's certification: I/We certify that the soil referenced herein is taken entirely from those soils described in the Soil Data Sheet completed and certified by me/us for the Generation Site shown above and nothing has been added or done to such soil that would alter it in any way.

Print or Type Name: **Larry Macchert** Generator: ☒ Consultant: ☐ Signature and date: \_\_\_\_\_ Month: **12** Day: **18** Year: **05**

Transporter's certification: I/We acknowledge receipt of the soil described above and certify that such soil is being delivered in exactly the same condition as when received. I/We further certify that this soil is being directly transported from the Generation Site to the Designated Facility without off-loading, adding to, subtracting from or in any way delaying delivery to such site.

Print or Type Name: **ECO-STAR** Signature and date: \_\_\_\_\_ Month: **12** Day: **15** Year: **05**

Discrepancies: **PAC# 00177**  
**ID# 1189150**

Recycling Facility certifies the receipt of the soil covered by this manifest except as noted above.

Print or Type Name: \_\_\_\_\_ Signature and date: \_\_\_\_\_ **12-15-05**

Generator and/or Consultant

Transporter

Recycling Facility

## **APPENDIX C**

### **HAZARDOUS WASTE TANK CLOSURE CERTIFICATION**

**UNIFIED PROGRAM CONSOLIDATED FORM  
HAZARDOUS WASTE  
HAZARDOUS WASTE TANK CLOSURE CERTIFICATION**

Page 1 of 1

**I. FACILITY IDENTIFICATION**

BUSINESS NAME (Same as FACILITY NAME or DBA - Doing Business As) 1 FACILITY ID# 1

TANK OWNER NAME 740  
ATLANTIC RICHFIELD COMPANY

TANK OWNER ADDRESS 741  
4371 CRENSHAW BOULEVARD

TANK OWNER CITY 742 STATE CALIFORNIA 743 ZIP CODE 90008 744

**II. TANK CLOSURE INFORMATION**

TANK INTERIOR ATMOSPHERE READINGS	Tank ID # (Attach additional copies of this page for more than three tanks)	Concentration of Flammable Vapor, %			Concentration of Oxygen, %		
		Top	Center	Bottom	Top	Center	Bottom
1	1118/2 745	<1 (0.1%) 746a	<1 (0.1%) 746b	<1 (0.1%) 746c	20.9 747a	20.9 747b	20.9 747c
2	748	748a	748b	748c	748d	748e	748f
3	751	751a	751b	751c	751d	751e	751f

**III. CERTIFICATION**

On examination of the tank, I certify the tank is visually free from product, sludge, scale (thin, flaky residual of tank contents), rinsewater and debris. I further certify that the information provided herein is true and accurate to the best of my knowledge.

SIGNATURE OF CERTIFIER 754  
Nancy Cartaway

NAME OF CERTIFIER (Print) 755  
Nancy Cartaway

TITLE OF CERTIFIER 756  
Certified Industrial Hygienist

ADDRESS 757  
991 East California Boulevard

CITY 758  
Pasadena, California 91106

PHONE 759  
626 797 4000; 626 676 7681

DATE 760 11/18/2005 CERTIFICATION TIME 761 1:59pm - 2:01pm

STATUS OR AFFILIATION OF CERTIFYING PERSON 762  
Certifier is a representative of the CUPA, authorized agency, or LIA:

☐ Yes ☒ No

Name of CUPA, authorized agency, or LIA: 763  
LOS ANGELES CITY FIRE DEPARTMENT

If certifier is other than CUPA/LIA check appropriate box below: 764

- ☒ a. Certified Industrial Hygienist (CIH)  
☐ b. Certified Safety Professional (CSP)  
☐ c. Certified Marine Chemist (CMC)  
☐ d. Registered Environmental Health Specialist (REHS)  
☐ e. Professional Engineer (PE)  
☐ f. Class II Registered Environmental Assessor  
☐ g. Contractors' State License Board licensed contractor (with hazardous substance removal certification)

TANK PREVIOUSLY HELD FLAMMABLE OR COMBUSTIBLE MATERIALS 765  
CONCRETE

(If yes, the tank interior atmosphere shall be re-checked with a combustible gas indicator prior to work being conducted on the tank.) ☐ Yes ☒ No

CERTIFIER'S TANK MANAGEMENT INSTRUCTIONS FOR SCRAP DEALER, DISPOSAL FACILITY, ETC.: 766

INSERT TANK COMPONENTS BEFORE TORCH CUTTING OR USING  
SPARKING TOOLS ON OR NEAR COMPONENTS

A copy of this certificate shall accompany the tank to the recycling/disposal facility and be provided to the agency overseeing tank closure (i.e. CUPA or other authorized local agency), the owner and/or operator of the tank system, and the tank removal contractor.

GASTECH CT 402 # 9844235

ISO-GALVAN STEEL TANK, SINGLE-WALL, 10 PIPES

## **APPENDIX D**

### **UST RINSEATE MANIFEST**

UNIFORM HAZARDOUS WASTE MANIFEST		1. Generator's US EPA ID No.	Manifest Document No.	2. Page 1 of 1	Information in the shaded areas is not required by Federal law.
3. Generator's Name and Mailing Address <b>Agro Products Company</b> <b>PO Box 90377</b> <b>Los Angeles, Ca. 90009</b>		4. Generator's Phone (310) <b>342-9858</b>		A. State Manifest Document Number <b>24036395</b>	
5. Transporter 1 Company Name <b>Nieto and Sons Trucking, Inc.</b>		6. US EPA ID Number <b>CATD000100065</b>		C. State Transporter ID (Reserved)	
7. Transporter 2 Company Name		8. US EPA ID Number		D. Transporter's Phone <b>714-590-6855</b>	
9. Designated Facility Name and Site Address <b>Delfino Kardon</b> <b>2000 N. Alameda Street</b> <b>Compton, CA 90222</b>		10. USEPA ID Number <b>CATD000100065</b>		E. State Facility ID <b>CA17800133012</b>	
11. US DOT Description (including Proper Shipping Name, Hazard Class, and ID Number)		12. Containers No. Type	13. Total Quantity	14. Unit Wt/Vol	Waste Number
a. <b>NON-RCRA HAZARDOUS WASTE LIQUID</b>		0 0 1 T T X	500		Sign EPA/Other
b.					Sign EPA/Other
c.					Sign EPA/Other
d.					Sign EPA/Other
15. Special Handling Instructions and Additional Information <b>NO SMOKING</b> <b>24 Hour Emergency Phone Number : 714-590-6855</b> <b>Wear Appropriate Protective Clothing</b>		K. Handling Codes for Wastes Listed Above <b>P-01</b>			
16. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations.  If I am a large quantity generator, I certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and that I have selected the practicable method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment; OR, if I am a small quantity generator, I have made a good faith effort to minimize my waste generation and select the best waste management method that is available to me and that I can afford.					
Printed/Typed Name <b>CABE TOWNA</b>		Signature <i>[Signature]</i>		Month Day Year <b>11/1/05</b>	
17. Transporter 1 Acknowledgement of Receipt of Materials Printed/Typed Name <b>Raul Rodriguez</b>		Signature <i>[Signature]</i>		Month Day Year <b>11/1/05</b>	
18. Transporter 2 Acknowledgement of Receipt of Materials Printed/Typed Name		Signature		Month Day Year	
19. Discrepancy Indication Space					
20. Facility Owner or Operator Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19. Printed/Typed Name <b>JOHNAL P. SVAY</b>		Signature <i>[Signature]</i>		Month Day Year <b>11/17/05</b>	

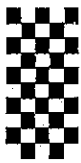
DO NOT WRITE BELOW THIS LINE.

IN CASE OF EMERGENCY OR SPILL, CALL THE NATIONAL RESPONSE CENTER 1-800-424-8802. WITHIN CALIFORNIA, CALL 1-800-852-7550



## **APPENDIX E**

### **UST CERTIFICATE OF DESTRUCTION**



# **CERTIFICATE OF DESTRUCTION**

**ECOLOGY AUTO PARTS  
13780 E. IMPERIAL HWY  
SANTA FE SPRINGS, CA 90670  
(562) 404-8683**

**COMPANY:** ARCO #0177

**JOB SITE ADDRESS:** 4371 CRENSHAW BLVD  
LOS ANGELES, CA

**DESCRIPTION:** 1-100 GALLON STEEL TANK

**UNDERGROUND STORAGE TANK(S)  
HAVE BEEN SCRAPED, CRUSHED AND DESTROYED AT  
ECOLOGY AUTO PARTS  
SANTA FE SPRINGS, CA  
ON: 11/19/05**

**SIGNATURE:** Barbara Medrano  
**TITLE:** MANAGER/BARBARA MEDRANO  
**DATE:** 01/30/06

## **APPENDIX F**

### **CERTIFIED ANALYTICAL REPORT AND CHAIN-OF-CUSTODY DOCUMENTATION**



## LABORATORY REPORT

Prepared For: SECOR International, Inc.-Orange County  
11085 Knott Ave, Suite B  
Cypress, CA 90630  
Attention: Cathy Sanford

Project: ARCO 0177, Los Angeles

Sampled: 11/17/05-11/18/05

Received: 11/18/05

Issued: 11/22/05 14:30

NELAP #01108CA California ELAP#1197 CSDLAC #10117

*The results listed within this Laboratory Report pertain only to the samples tested in the laboratory. The analyses contained in this report were performed in accordance with the BPGCLN Technical Specifications, applicable federal, state, local regulations and certification requirements as well as the methodologies as described in laboratory SOPs reviewed by the BPGCLN. This Laboratory Report is confidential and is intended for the sole use of Del Mar Analytical and its client. This report shall not be reproduced, except in full, without written permission from Del Mar Analytical. The Chain of Custody, 1 page, is included and is an integral part of this report. This entire report was reviewed and approved for release.*

## CASE NARRATIVE

**SAMPLE RECEIPT:** Samples were received intact, at 5°C, on ice and with chain of custody documentation.

**HOLDING TIMES:** All samples were analyzed within prescribed holding times and/or in accordance with the Del Mar Analytical Sample Acceptance Policy unless otherwise noted in the report.

**PRESERVATION:** Samples requiring preservation were verified prior to sample analysis.

**QA/QC CRITERIA:** All analyses met method criteria, except as noted in the report with data qualifiers.

**COMMENTS:** Results that fall between the MDL and RL are 'J' flagged.

**SUBCONTRACTED:** No analyses were subcontracted to an outside laboratory.

### LABORATORY ID

### CLIENT ID

### MATRIX

IOK1736-01

WO1-7.5

Soil

IOK1736-02

WO2-10

Soil

IOK1736-03

SP-2

Soil

IOK1736-04

SP-1

Soil

IOK1736-05

TB-0177-20051118

Water

Reviewed By:

Del Mar Analytical, Irvine

Lisa Reightley

Project Manager



SECOR International, Inc.-Orange County  
11085 Knott Ave, Suite B  
Cypress, CA 90630  
Attention: Cathy Sanford

Project ID: ARCO 0177, Los Angeles  
Report Number: IOK1736

Sampled: 11/17/05-11/18/05  
Received: 11/18/05

## TOTAL RECOVERABLE PETROLEUM HYDROCARBONS (EPA 418.1)

Analyte	Method	Batch	MDL Limit	Reporting Limit	Sample Result	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers
Sample ID: IOK1736-01 (WO1-7.5 - Soil)					Sampled: 11/17/05				
Reporting Units: mg/kg									
Total Recoverable Hydrocarbons	EPA 418.1	5K21049	1.5	5.0	2.8	0.999	11/21/05	11/21/05	J,DX
Sample ID: IOK1736-02 (WO2-10 - Soil)					Sampled: 11/18/05				
Reporting Units: mg/kg									
Total Recoverable Hydrocarbons	EPA 418.1	5K21049	1.5	5.0	ND	0.998	11/21/05	11/21/05	
Sample ID: IOK1736-03 (SP-2 - Soil)					Sampled: 11/18/05				
Reporting Units: mg/kg									
Total Recoverable Hydrocarbons	EPA 418.1	5K21049	75	250	17000	49.9	11/21/05	11/21/05	

Del Mar Analytical, Irvine  
Lisa Reightley  
Project Manager



SECOR International, Inc.-Orange County  
11085 Knott Ave, Suite B  
Cypress, CA 90630  
Attention: Cathy Sanford

Project ID: ARCO 0177, Los Angeles

Report Number: IOK1736

Sampled: 11/17/05-11/18/05  
Received: 11/18/05

## VOLATILE FUEL HYDROCARBONS (EPA 5030/8015M)

Analyte	Method	Batch	MDL Limit	Reporting Limit	Sample Result	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers
Sample ID: IOK1736-05 (TB-0177-20051118 - Water)					Sampled: 11/18/05				
Reporting Units: ug/l									
GRO (C4 - C12)	EPA 8015B	5K18105	24	50	ND	1	11/18/05	11/18/05	
Surrogate: 4-BFB (FID) (65-140%)					109 %				

Del Mar Analytical, Irvine  
Lisa Reightley  
Project Manager



SECOR International, Inc.-Orange County  
 11085 Knott Ave, Suite B  
 Cypress, CA 90630  
 Attention: Cathy Sanford

Project ID: ARCO 0177, Los Angeles

Report Number: IOK1736

Sampled: 11/17/05-11/18/05  
 Received: 11/18/05

## VOLATILE FUEL HYDROCARBONS (EPA 5035B/CADHS Mod. 8015)

Analyte	Method	Batch	MDL Limit	Reporting Limit	Sample Result	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers
<b>Sample ID: IOK1736-01 (WO1-7.5 - Soil)</b>					<b>Sampled: 11/17/05</b>				
Reporting Units: mg/kg									
<b>GRO (C4 - C12)</b>	EPA 8015B	5K18124	0.051	0.34	<b>0.077</b>	0.858	11/18/05	11/18/05	J,DX
Surrogate: 4-BFB (FID) (70-135%)					91 %				
<b>Sample ID: IOK1736-02 (WO2-10 - Soil)</b>					<b>Sampled: 11/18/05</b>				
Reporting Units: mg/kg									
GRO (C4 - C12)	EPA 8015B	5K18124	0.047	0.31	ND	0.782	11/18/05	11/18/05	
Surrogate: 4-BFB (FID) (70-135%)					79 %				
<b>Sample ID: IOK1736-03 (SP-2 - Soil)</b>					<b>Sampled: 11/18/05</b>				
Reporting Units: mg/kg									
<b>GRO (C4 - C12)</b>	EPA 8015B	5K18101	4.8	32	<b>190</b>	79.9	11/18/05	11/18/05	
Surrogate: 4-BFB (FID) (70-135%)					181 %				AZ
<b>Sample ID: IOK1736-04 (SP-1 - Soil)</b>					<b>Sampled: 11/18/05</b>				
Reporting Units: mg/kg									
GRO (C4 - C12)	EPA 8015B	5K18047	0.048	0.32	ND	0.801	11/18/05	11/19/05	
Surrogate: 4-BFB (FID) (70-135%)					100 %				

**Del Mar Analytical, Irvine**  
 Lisa Reightley  
 Project Manager



SECOR International, Inc.-Orange County  
 11085 Knott Ave, Suite B  
 Cypress, CA 90630  
 Attention: Cathy Sanford

Project ID: ARCO 0177, Los Angeles

Report Number: IOK1736

Sampled: 11/17/05-11/18/05  
 Received: 11/18/05

## BTEX/OXYGENATES by GC/MS (EPA 8260B)

Analyte	Method	Batch	MDL Limit	Reporting Limit	Sample Result	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers
<b>Sample ID: IOK1736-05 (TB-0177-20051118 - Water)</b>					<b>Sampled: 11/18/05</b>				
<b>Reporting Units: ug/l</b>									
Benzene	EPA 8260B	5K20010	0.28	2.0	ND	1	11/20/05	11/20/05	
Ethylbenzene	EPA 8260B	5K20010	0.25	2.0	ND	1	11/20/05	11/20/05	
Toluene	EPA 8260B	5K20010	0.36	2.0	ND	1	11/20/05	11/20/05	
m,p-Xylenes	EPA 8260B	5K20010	0.52	2.0	ND	1	11/20/05	11/20/05	
o-Xylene	EPA 8260B	5K20010	0.24	2.0	ND	1	11/20/05	11/20/05	
Xylenes, Total	EPA 8260B	5K20010	0.52	4.0	ND	1	11/20/05	11/20/05	
Di-isopropyl Ether (DIPE)	EPA 8260B	5K20010	0.25	5.0	ND	1	11/20/05	11/20/05	
Ethyl tert-Butyl Ether (ETBE)	EPA 8260B	5K20010	0.28	5.0	ND	1	11/20/05	11/20/05	
tert-Amyl Methyl Ether (TAME)	EPA 8260B	5K20010	0.33	5.0	ND	1	11/20/05	11/20/05	
Methyl-tert-butyl Ether (MTBE)	EPA 8260B	5K20010	0.32	5.0	ND	1	11/20/05	11/20/05	
tert-Butanol (TBA)	EPA 8260B	5K20010	3.1	50	ND	1	11/20/05	11/20/05	
Ethanol	EPA 8260B	5K20010	100	150	ND	1	11/20/05	11/20/05	IO
<i>Surrogate: Dibromofluoromethane (80-120%)</i>					<i>114 %</i>				
<i>Surrogate: Toluene-d8 (80-120%)</i>					<i>103 %</i>				
<i>Surrogate: 4-Bromofluorobenzene (80-120%)</i>					<i>96 %</i>				

**Del Mar Analytical, Irvine**  
 Lisa Reightley  
 Project Manager





SECOR International, Inc.-Orange County  
 11085 Knott Ave, Suite B  
 Cypress, CA 90630  
 Attention: Cathy Sanford

Project ID: ARCO 0177, Los Angeles

Report Number: IOK1736

Sampled: 11/17/05-11/18/05  
 Received: 11/18/05

## BTEX/OXYGENATES by GC/MS (EPA 5035/8260B)

Analyte	Method	Batch	MDL Limit	Reporting Limit	Sample Result	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers
<b>Sample ID: IOK1736-01 (WO1-7.5 - Soil)</b>					<b>Sampled: 11/17/05</b>				
Reporting Units: mg/kg									
Benzene	EPA 8260B	5K19015	0.00042	0.0017	ND	0.842	11/19/05	11/19/05	
Ethylbenzene	EPA 8260B	5K19015	0.00043	0.0017	<b>0.00069</b>	0.842	11/19/05	11/19/05	J,DX
Toluene	EPA 8260B	5K19015	0.00077	0.0017	<b>0.0017</b>	0.842	11/19/05	11/19/05	
o-Xylene	EPA 8260B	5K19015	0.00040	0.0017	<b>0.0011</b>	0.842	11/19/05	11/19/05	J,DX
m,p-Xylenes	EPA 8260B	5K19015	0.00063	0.0017	<b>0.0030</b>	0.842	11/19/05	11/19/05	
Xylenes, Total	EPA 8260B	5K19015	0.00063	0.0034	<b>0.0041</b>	0.842	11/19/05	11/19/05	
Di-isopropyl Ether (DIPE)	EPA 8260B	5K19015	0.00031	0.0042	ND	0.842	11/19/05	11/19/05	
Ethyl tert-Butyl Ether (ETBE)	EPA 8260B	5K19015	0.00049	0.0042	ND	0.842	11/19/05	11/19/05	
tert-Amyl Methyl Ether (TAME)	EPA 8260B	5K19015	0.00054	0.0042	ND	0.842	11/19/05	11/19/05	
Methyl-tert-butyl Ether (MTBE)	EPA 8260B	5K19015	0.00084	0.0042	ND	0.842	11/19/05	11/19/05	
tert-Butanol (TBA)	EPA 8260B	5K19015	0.0042	0.042	ND	0.842	11/19/05	11/19/05	
Ethanol	EPA 8260B	5K19015	0.10	0.25	ND	0.842	11/19/05	11/19/05	
Surrogate: Dibromofluoromethane (80-125%)					92 %				
Surrogate: Toluene-d8 (80-120%)					100 %				
Surrogate: 4-Bromofluorobenzene (80-120%)					96 %				
<b>Sample ID: IOK1736-02 (WO2-10 - Soil)</b>					<b>Sampled: 11/18/05</b>				
Reporting Units: mg/kg									
Benzene	EPA 8260B	5K19015	0.00039	0.0015	ND	0.772	11/19/05	11/19/05	
Ethylbenzene	EPA 8260B	5K19015	0.00039	0.0015	ND	0.772	11/19/05	11/19/05	
Toluene	EPA 8260B	5K19015	0.00070	0.0015	ND	0.772	11/19/05	11/19/05	
o-Xylene	EPA 8260B	5K19015	0.00036	0.0015	ND	0.772	11/19/05	11/19/05	
m,p-Xylenes	EPA 8260B	5K19015	0.00058	0.0015	ND	0.772	11/19/05	11/19/05	
Xylenes, Total	EPA 8260B	5K19015	0.00058	0.0031	ND	0.772	11/19/05	11/19/05	
Di-isopropyl Ether (DIPE)	EPA 8260B	5K19015	0.00029	0.0039	ND	0.772	11/19/05	11/19/05	
Ethyl tert-Butyl Ether (ETBE)	EPA 8260B	5K19015	0.00045	0.0039	ND	0.772	11/19/05	11/19/05	
tert-Amyl Methyl Ether (TAME)	EPA 8260B	5K19015	0.00049	0.0039	ND	0.772	11/19/05	11/19/05	
Methyl-tert-butyl Ether (MTBE)	EPA 8260B	5K19015	0.00077	0.0039	ND	0.772	11/19/05	11/19/05	
tert-Butanol (TBA)	EPA 8260B	5K19015	0.0039	0.039	ND	0.772	11/19/05	11/19/05	
Ethanol	EPA 8260B	5K19015	0.093	0.23	ND	0.772	11/19/05	11/19/05	
Surrogate: Dibromofluoromethane (80-125%)					92 %				
Surrogate: Toluene-d8 (80-120%)					100 %				
Surrogate: 4-Bromofluorobenzene (80-120%)					98 %				

**Del Mar Analytical, Irvine**  
 Lisa Reightley  
 Project Manager



SECOR International, Inc.-Orange County  
 11085 Knott Ave, Suite B  
 Cypress, CA 90630  
 Attention: Cathy Sanford

Project ID: ARCO 0177, Los Angeles

Report Number: IOK1736

Sampled: 11/17/05-11/18/05  
 Received: 11/18/05

## BTEX/OXYGENATES by GC/MS (EPA 5035/8260B)

Analyte	Method	Batch	MDL Limit	Reporting Limit	Sample Result	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers
<b>Sample ID: IOK1736-03 (SP-2 - Soil)</b>					<b>Sampled: 11/18/05</b>				
Reporting Units: mg/kg									
Benzene	EPA 8260B	5K20026	0.028	0.082	<b>0.14</b>	82.4	11/20/05	11/20/05	
Ethylbenzene	EPA 8260B	5K20026	0.022	0.082	<b>1.3</b>	82.4	11/20/05	11/20/05	
Toluene	EPA 8260B	5K20026	0.027	0.082	<b>2.0</b>	82.4	11/20/05	11/20/05	
o-Xylene	EPA 8260B	5K20026	0.023	0.082	<b>2.6</b>	82.4	11/20/05	11/20/05	
m,p-Xylenes	EPA 8260B	5K20026	0.044	0.082	<b>5.6</b>	82.4	11/20/05	11/20/05	
Xylenes, Total	EPA 8260B	5K20026	0.044	0.16	<b>8.1</b>	82.4	11/20/05	11/20/05	
Di-isopropyl Ether (DIPE)	EPA 8260B	5K20026	0.042	0.21	ND	82.4	11/20/05	11/20/05	
Ethyl tert-Butyl Ether (ETBE)	EPA 8260B	5K20026	0.054	0.21	ND	82.4	11/20/05	11/20/05	
tert-Amyl Methyl Ether (TAME)	EPA 8260B	5K20026	0.056	0.21	ND	82.4	11/20/05	11/20/05	
Methyl-tert-butyl Ether (MTBE)	EPA 8260B	5K20026	0.051	0.21	ND	82.4	11/20/05	11/20/05	
tert-Butanol (TBA)	EPA 8260B	5K20026	0.41	4.1	ND	82.4	11/20/05	11/20/05	
Ethanol	EPA 8260B	5K20026	8.2	12	ND	82.4	11/20/05	11/20/05	
Surrogate: Dibromofluoromethane (55-140%)					81 %				
Surrogate: Toluene-d8 (60-140%)					83 %				
Surrogate: 4-Bromofluorobenzene (65-140%)					87 %				

<b>Sample ID: IOK1736-04 (SP-1 - Soil)</b>					<b>Sampled: 11/18/05</b>				
Reporting Units: mg/kg									
Benzene	EPA 8260B	5K19015	0.00039	0.0016	ND	0.776	11/19/05	11/19/05	
Ethylbenzene	EPA 8260B	5K19015	0.00040	0.0016	ND	0.776	11/19/05	11/19/05	
Toluene	EPA 8260B	5K19015	0.00071	0.0016	ND	0.776	11/19/05	11/19/05	
o-Xylene	EPA 8260B	5K19015	0.00036	0.0016	ND	0.776	11/19/05	11/19/05	
m,p-Xylenes	EPA 8260B	5K19015	0.00058	0.0016	ND	0.776	11/19/05	11/19/05	
Xylenes, Total	EPA 8260B	5K19015	0.00058	0.0031	ND	0.776	11/19/05	11/19/05	
Di-isopropyl Ether (DIPE)	EPA 8260B	5K19015	0.00029	0.0039	ND	0.776	11/19/05	11/19/05	
Ethyl tert-Butyl Ether (ETBE)	EPA 8260B	5K19015	0.00045	0.0039	ND	0.776	11/19/05	11/19/05	
tert-Amyl Methyl Ether (TAME)	EPA 8260B	5K19015	0.00050	0.0039	ND	0.776	11/19/05	11/19/05	
Methyl-tert-butyl Ether (MTBE)	EPA 8260B	5K19015	0.00078	0.0039	ND	0.776	11/19/05	11/19/05	
tert-Butanol (TBA)	EPA 8260B	5K19015	0.0039	0.039	ND	0.776	11/19/05	11/19/05	
Ethanol	EPA 8260B	5K19015	0.093	0.23	ND	0.776	11/19/05	11/19/05	
Surrogate: Dibromofluoromethane (80-125%)					93 %				
Surrogate: Toluene-d8 (80-120%)					101 %				
Surrogate: 4-Bromofluorobenzene (80-120%)					101 %				

**Del Mar Analytical, Irvine**  
 Lisa Reightley  
 Project Manager



SECOR International, Inc.-Orange County  
 11085 Knott Ave, Suite B  
 Cypress, CA 90630  
 Attention: Cathy Sanford

Project ID: ARCO 0177, Los Angeles

Report Number: IOK1736

Sampled: 11/17/05-11/18/05  
 Received: 11/18/05

## METHOD BLANK/QC DATA

### TOTAL RECOVERABLE PETROLEUM HYDROCARBONS (EPA 418.1)

Analyte	Result	Reporting Limit	MDL	Units	Spike Level	Source Result	%REC Limits	RPD	RPD Limit	Data Qualifiers
<b>Batch: 5K21049 Extracted: 11/21/05</b>										
<b>Blank Analyzed: 11/21/2005 (5K21049-BLK1)</b>										
Total Recoverable Hydrocarbons	ND	5.0	1.5	mg/kg						
<b>LCS Analyzed: 11/21/2005 (5K21049-BS1)</b>										
Total Recoverable Hydrocarbons	14.0	5.0	1.5	mg/kg	20.0		70 55-130			
<b>Matrix Spike Analyzed: 11/21/2005 (5K21049-MS1)</b>										
Total Recoverable Hydrocarbons	11.2	5.0	1.5	mg/kg	20.0	2.8	42 35-130			
<b>Matrix Spike Dup Analyzed: 11/21/2005 (5K21049-MSD1)</b>										
Total Recoverable Hydrocarbons	12.3	5.0	1.5	mg/kg	20.0	2.8	48 35-130	9	25	

**Del Mar Analytical, Irvine**  
 Lisa Reightley  
 Project Manager



SECOR International, Inc.-Orange County  
 11085 Knott Ave, Suite B  
 Cypress, CA 90630  
 Attention: Cathy Sanford

Project ID: ARCO 0177, Los Angeles

Report Number: IOK1736

Sampled: 11/17/05-11/18/05  
 Received: 11/18/05

## METHOD BLANK/QC DATA

### VOLATILE FUEL HYDROCARBONS (EPA 5030/8015M)

Analyte	Result	Reporting Limit	MDL	Units	Spike Level	Source Result	%REC Limits	RPD	RPD Limit	Data Qualifiers
<b>Batch: 5K18105 Extracted: 11/18/05</b>										
<b>Blank Analyzed: 11/18/2005 (5K18105-BLK1)</b>										
GRO (C4 - C12)	ND	50	24	ug/l						
Surrogate: 4-BFB (FID)	13.6			ug/l	10.0		136 65-140			
<b>LCS Analyzed: 11/19/2005 (5K18105-BS1)</b>										
GRO (C4 - C12)	949	50	24	ug/l	800		119 65-140			
Surrogate: 4-BFB (FID)	37.1			ug/l	30.0		124 65-140			
<b>Matrix Spike Analyzed: 11/19/2005 (5K18105-MS2)</b>										
					<b>Source: IOK0834-22</b>					
GRO (C4 - C12)	294	50	24	ug/l	220	ND	134 60-145			
Surrogate: 4-BFB (FID)	12.9			ug/l	10.0		129 65-140			
<b>Matrix Spike Dup Analyzed: 11/19/2005 (5K18105-MSD2)</b>										
					<b>Source: IOK0834-22</b>					
GRO (C4 - C12)	311	50	24	ug/l	220	ND	141 60-145	6	20	
Surrogate: 4-BFB (FID)	13.5			ug/l	10.0		135 65-140			

**Del Mar Analytical, Irvine**  
 Lisa Reightley  
 Project Manager



SECOR International, Inc.-Orange County  
 11085 Knott Ave, Suite B  
 Cypress, CA 90630  
 Attention: Cathy Sanford

Project ID: ARCO 0177, Los Angeles  
 Report Number: IOK1736

Sampled: 11/17/05-11/18/05  
 Received: 11/18/05

## METHOD BLANK/QC DATA

### VOLATILE FUEL HYDROCARBONS (EPA 5035B/CADHS Mod. 8015)

Analyte	Result	Reporting Limit	MDL	Units	Spike Level	Source Result	%REC %REC Limits	RPD	RPD Limit	Data Qualifiers
<b>Batch: 5K18047 Extracted: 11/18/05</b>										
<b>Blank Analyzed: 11/18/2005 (5K18047-BLK1)</b>										
GRO (C4 - C12)	ND	0.40	0.060	mg/kg						
Surrogate: 4-BFB (FID)	0.0218			mg/kg	0.0200		109 70-135			
<b>LCS Analyzed: 11/18/2005 (5K18047-BS1)</b>										
GRO (C4 - C12)	1.89	0.40	0.060	mg/kg	1.60		118 65-135			
Surrogate: 4-BFB (FID)	0.0772			mg/kg	0.0600		129 70-135			
<b>LCS Dup Analyzed: 11/18/2005 (5K18047-BSD1)</b>										
GRO (C4 - C12)	1.55	0.40	0.060	mg/kg	1.60		97 65-135	20	20	
Surrogate: 4-BFB (FID)	0.0683			mg/kg	0.0600		114 70-135			
<b>Matrix Spike Analyzed: 11/18/2005 (5K18047-MS1)</b>					<b>Source: IOK1382-05</b>					
GRO (C4 - C12)	0.360	0.34	0.051	mg/kg	0.373	ND	97 55-145			
Surrogate: 4-BFB (FID)	0.0170			mg/kg	0.0169		101 70-135			
<b>Matrix Spike Dup Analyzed: 11/18/2005 (5K18047-MSD1)</b>					<b>Source: IOK1382-05</b>					
GRO (C4 - C12)	0.408	0.41	0.061	mg/kg	0.448	ND	91 55-145	12	35	J,DX
Surrogate: 4-BFB (FID)	0.0198			mg/kg	0.0204		97 70-135			
<b>Batch: 5K18101 Extracted: 11/18/05</b>										
<b>Blank Analyzed: 11/18/2005 (5K18101-BLK1)</b>										
GRO (C4 - C12)	ND	20	3.0	mg/kg						
Surrogate: 4-BFB (FID)	2.23			mg/kg	2.00		112 70-135			
<b>LCS Analyzed: 11/19/2005 (5K18101-BS1)</b>										<b>DU</b>
GRO (C4 - C12)	167	40	6.0	mg/kg	160		104 65-135			
Surrogate: 4-BFB (FID)	6.06			mg/kg	6.00		101 70-135			

Del Mar Analytical, Irvine  
 Lisa Reightley  
 Project Manager



SECOR International, Inc.-Orange County  
 11085 Knott Ave, Suite B  
 Cypress, CA 90630  
 Attention: Cathy Sanford

Project ID: ARCO 0177, Los Angeles

Report Number: IOK1736

Sampled: 11/17/05-11/18/05  
 Received: 11/18/05

## METHOD BLANK/QC DATA

### VOLATILE FUEL HYDROCARBONS (EPA 5035B/CADHS Mod. 8015)

Analyte	Result	Reporting Limit	MDL	Units	Spike Level	Source Result	%REC Limits	RPD	RPD Limit	Data Qualifiers
<b><u>Batch: 5K18101 Extracted: 11/18/05</u></b>										
<b>LCS Dup Analyzed: 11/18/2005 (5K18101-BSD1)</b>										
GRO (C4 - C12)	189	40	6.0	mg/kg	160		118 65-135	12	20	
Surrogate: 4-BFB (FID)	8.00			mg/kg	6.00		133 70-135			
<b><u>Batch: 5K18124 Extracted: 11/18/05</u></b>										
<b>Blank Analyzed: 11/18/2005 (5K18124-BLK1)</b>										
GRO (C4 - C12)	ND	0.40	0.060	mg/kg						
Surrogate: 4-BFB (FID)	0.0155			mg/kg	0.0200		78 70-135			
<b>LCS Analyzed: 11/18/2005 (5K18124-BS1)</b>										
GRO (C4 - C12)	1.55	0.40	0.060	mg/kg	1.60		97 65-135			DU
Surrogate: 4-BFB (FID)	0.0549			mg/kg	0.0600		92 70-135			
<b>LCS Dup Analyzed: 11/18/2005 (5K18124-BSD1)</b>										
GRO (C4 - C12)	1.40	0.40	0.060	mg/kg	1.60		88 65-135	10	20	
Surrogate: 4-BFB (FID)	0.0521			mg/kg	0.0600		87 70-135			

Del Mar Analytical, Irvine  
 Lisa Reightley  
 Project Manager



SECOR International, Inc.-Orange County  
 11085 Knott Ave, Suite B  
 Cypress, CA 90630  
 Attention: Cathy Sanford

Project ID: ARCO 0177, Los Angeles  
 Report Number: IOK1736

Sampled: 11/17/05-11/18/05  
 Received: 11/18/05

## METHOD BLANK/QC DATA

### BTEX/OXYGENATES by GC/MS (EPA 8260B)

Analyte	Result	Reporting Limit	MDL	Units	Spike Level	Source Result	%REC %REC Limits	RPD	RPD Limit	Data Qualifiers
<b>Batch: 5K20010 Extracted: 11/20/05</b>										
<b>Blank Analyzed: 11/20/2005 (5K20010-BLK1)</b>										
Benzene	ND	2.0	0.28	ug/l						
Ethylbenzene	ND	2.0	0.25	ug/l						
Toluene	ND	2.0	0.36	ug/l						
m,p-Xylenes	ND	2.0	0.52	ug/l						
o-Xylene	ND	2.0	0.24	ug/l						
Xylenes, Total	ND	4.0	0.52	ug/l						
Di-isopropyl Ether (DIPE)	ND	5.0	0.25	ug/l						
Ethyl tert-Butyl Ether (ETBE)	ND	5.0	0.28	ug/l						
tert-Amyl Methyl Ether (TAME)	ND	5.0	0.33	ug/l						
Methyl-tert-butyl Ether (MTBE)	ND	5.0	0.32	ug/l						
tert-Butanol (TBA)	ND	50	3.1	ug/l						
Ethanol	ND	150	100	ug/l						
Surrogate: Dibromofluoromethane	25.6			ug/l	25.0		102	80-120		
Surrogate: Toluene-d8	25.2			ug/l	25.0		101	80-120		
Surrogate: 4-Bromofluorobenzene	22.6			ug/l	25.0		90	80-120		
<b>LCS Analyzed: 11/20/2005 (5K20010-BS1)</b>										
Benzene	25.3	2.0	0.28	ug/l	25.0		101	65-120		
Ethylbenzene	26.0	2.0	0.25	ug/l	25.0		104	70-125		
Toluene	25.3	2.0	0.36	ug/l	25.0		101	70-125		
m,p-Xylenes	50.3	2.0	0.52	ug/l	50.0		101	70-125		
o-Xylene	24.4	2.0	0.24	ug/l	25.0		98	70-125		
Xylenes, Total	74.7	4.0	0.52	ug/l	75.0		100	70-125		
Di-isopropyl Ether (DIPE)	26.6	5.0	0.25	ug/l	25.0		106	60-135		
Ethyl tert-Butyl Ether (ETBE)	24.1	5.0	0.28	ug/l	25.0		96	60-135		
tert-Amyl Methyl Ether (TAME)	25.4	5.0	0.33	ug/l	25.0		102	60-135		
Methyl-tert-butyl Ether (MTBE)	25.8	5.0	0.32	ug/l	25.0		103	55-140		
tert-Butanol (TBA)	133	50	3.1	ug/l	125		106	65-135		
Ethanol	343	150	100	ug/l	250		137	35-160		
Surrogate: Dibromofluoromethane	27.8			ug/l	25.0		111	80-120		
Surrogate: Toluene-d8	24.9			ug/l	25.0		100	80-120		
Surrogate: 4-Bromofluorobenzene	25.6			ug/l	25.0		102	80-120		

**Del Mar Analytical, Irvine**  
 Lisa Reightley  
 Project Manager



SECOR International, Inc.-Orange County  
 11085 Knott Ave, Suite B  
 Cypress, CA 90630  
 Attention: Cathy Sanford

Project ID: ARCO 0177, Los Angeles  
 Report Number: IOK1736

Sampled: 11/17/05-11/18/05  
 Received: 11/18/05

## METHOD BLANK/QC DATA

### BTEX/OXYGENATES by GC/MS (EPA 8260B)

Analyte	Result	Reporting Limit	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Data Qualifiers
<b>Batch: 5K20010 Extracted: 11/20/05</b>											
<b>Matrix Spike Analyzed: 11/20/2005 (5K20010-MS1)</b>						<b>Source: IOK1238-09</b>					
Benzene	26.1	2.0	0.28	ug/l	25.0	ND	104	60-125			
Ethylbenzene	27.0	2.0	0.25	ug/l	25.0	ND	108	65-130			
Toluene	26.7	2.0	0.36	ug/l	25.0	ND	107	65-125			
m,p-Xylenes	51.8	2.0	0.52	ug/l	50.0	ND	104	60-130			
o-Xylene	25.0	2.0	0.24	ug/l	25.0	ND	100	60-125			
Xylenes, Total	76.8	4.0	0.52	ug/l	75.0	ND	102	60-130			
Di-isopropyl Ether (DIPE)	28.0	5.0	0.25	ug/l	25.0	ND	112	60-140			
Ethyl tert-Butyl Ether (ETBE)	25.9	5.0	0.28	ug/l	25.0	ND	104	55-135			
tert-Amyl Methyl Ether (TAME)	27.3	5.0	0.33	ug/l	25.0	ND	109	55-140			
Methyl-tert-butyl Ether (MTBE)	26.9	5.0	0.32	ug/l	25.0	ND	108	50-150			
tert-Butanol (TBA)	149	50	3.1	ug/l	125	ND	119	60-145			
Ethanol	349	150	100	ug/l	250	ND	140	35-160			
Surrogate: Dibromofluoromethane	29.0			ug/l	25.0		116	80-120			
Surrogate: Toluene-d8	24.5			ug/l	25.0		98	80-120			
Surrogate: 4-Bromofluorobenzene	25.0			ug/l	25.0		100	80-120			
<b>Matrix Spike Dup Analyzed: 11/20/2005 (5K20010-MSD1)</b>						<b>Source: IOK1238-09</b>					
Benzene	29.1	2.0	0.28	ug/l	25.0	ND	116	60-125	11	20	
Ethylbenzene	28.8	2.0	0.25	ug/l	25.0	ND	115	65-130	6	20	
Toluene	28.6	2.0	0.36	ug/l	25.0	ND	114	65-125	7	20	
m,p-Xylenes	57.2	2.0	0.52	ug/l	50.0	ND	114	60-130	10	25	
o-Xylene	27.5	2.0	0.24	ug/l	25.0	ND	110	60-125	10	20	
Xylenes, Total	84.8	4.0	0.52	ug/l	75.0	ND	113	60-130	10	20	
Di-isopropyl Ether (DIPE)	31.5	5.0	0.25	ug/l	25.0	ND	126	60-140	12	25	
Ethyl tert-Butyl Ether (ETBE)	29.0	5.0	0.28	ug/l	25.0	ND	116	55-135	11	25	
tert-Amyl Methyl Ether (TAME)	30.3	5.0	0.33	ug/l	25.0	ND	121	55-140	10	30	
Methyl-tert-butyl Ether (MTBE)	30.2	5.0	0.32	ug/l	25.0	ND	121	50-150	12	25	
tert-Butanol (TBA)	143	50	3.1	ug/l	125	ND	114	60-145	4	25	
Ethanol	345	150	100	ug/l	250	ND	138	35-160	1	30	
Surrogate: Dibromofluoromethane	29.0			ug/l	25.0		116	80-120			
Surrogate: Toluene-d8	25.1			ug/l	25.0		100	80-120			
Surrogate: 4-Bromofluorobenzene	25.0			ug/l	25.0		100	80-120			

**Del Mar Analytical, Irvine**  
 Lisa Reightley  
 Project Manager





SECOR International, Inc.-Orange County  
 11085 Knott Ave, Suite B  
 Cypress, CA 90630  
 Attention: Cathy Sanford

Project ID: ARCO 0177, Los Angeles  
 Report Number: IOK1736

Sampled: 11/17/05-11/18/05  
 Received: 11/18/05

## METHOD BLANK/QC DATA

### BTEX/OXYGENATES by GC/MS (EPA 5035/8260B)

Analyte	Result	Reporting Limit	MDL	Units	Spike Level	Source Result	%REC %REC Limits	RPD RPD	RPD Limit	Data Qualifiers
<b>Batch: 5K19015 Extracted: 11/19/05</b>										
<b>Blank Analyzed: 11/19/2005 (5K19015-BLK1)</b>										
Benzene	ND	0.0020	0.00050	mg/kg						
Ethylbenzene	ND	0.0020	0.00051	mg/kg						
Toluene	ND	0.0020	0.00091	mg/kg						
o-Xylene	ND	0.0020	0.00047	mg/kg						
m,p-Xylenes	ND	0.0020	0.00075	mg/kg						
Xylenes, Total	ND	0.0040	0.00075	mg/kg						
Di-isopropyl Ether (DIPE)	ND	0.0050	0.00037	mg/kg						
Ethyl tert-Butyl Ether (ETBE)	ND	0.0050	0.00058	mg/kg						
tert-Amyl Methyl Ether (TAME)	ND	0.0050	0.00064	mg/kg						
Methyl-tert-butyl Ether (MTBE)	ND	0.0050	0.0010	mg/kg						
tert-Butanol (TBA)	ND	0.050	0.0050	mg/kg						
Ethanol	ND	0.30	0.12	mg/kg						
Surrogate: Dibromofluoromethane	0.0482			mg/kg	0.0500		96	80-125		
Surrogate: Toluene-d8	0.0507			mg/kg	0.0500		101	80-120		
Surrogate: 4-Bromofluorobenzene	0.0516			mg/kg	0.0500		103	80-120		
<b>LCS Analyzed: 11/19/2005 (5K19015-BS1)</b>										
Benzene	0.0526	0.0020	0.00050	mg/kg	0.0500		105	65-120		
Ethylbenzene	0.0551	0.0020	0.00051	mg/kg	0.0500		110	70-125		
Toluene	0.0518	0.0020	0.00091	mg/kg	0.0500		104	70-125		
o-Xylene	0.0533	0.0020	0.00047	mg/kg	0.0500		107	70-125		
m,p-Xylenes	0.108	0.0020	0.00075	mg/kg	0.100		108	70-125		
Xylenes, Total	0.162	0.0040	0.00075	mg/kg	0.150		108	70-125		
Di-isopropyl Ether (DIPE)	0.0464	0.0050	0.00037	mg/kg	0.0500		93	60-135		
Ethyl tert-Butyl Ether (ETBE)	0.0470	0.0050	0.00058	mg/kg	0.0500		94	60-135		
tert-Amyl Methyl Ether (TAME)	0.0454	0.0050	0.00064	mg/kg	0.0500		91	60-140		
Methyl-tert-butyl Ether (MTBE)	0.0495	0.0050	0.0010	mg/kg	0.0500		99	55-140		
tert-Butanol (TBA)	0.317	0.050	0.0050	mg/kg	0.250		127	65-135		
Ethanol	0.303	0.30	0.12	mg/kg	0.500		61	35-160		
Surrogate: Dibromofluoromethane	0.0466			mg/kg	0.0500		93	80-125		
Surrogate: Toluene-d8	0.0506			mg/kg	0.0500		101	80-120		
Surrogate: 4-Bromofluorobenzene	0.0498			mg/kg	0.0500		100	80-120		

**Del Mar Analytical, Irvine**  
 Lisa Reightley  
 Project Manager



# Del Mar Analytical

17461 Derian Ave., Suite 100, Irvine, CA 92614 (949) 261-1022 FAX (949) 260-3297  
1014 E. Cooley Dr., Suite A, Colton, CA 92324 (909) 370-4667 FAX (909) 370-1046  
9484 Chesapeake Dr., Suite 805, San Diego, CA 92123 (858) 505-8596 FAX (858) 505-9689  
9830 South 51st St., Suite B-120, Phoenix, AZ 85044 (480) 785-0043 FAX (480) 785-0851  
2520 E. Sunset Rd. #3, Las Vegas, NV 89120 (702) 798-3620 FAX (702) 798-3621

SECOR International, Inc.-Orange County  
11085 Knott Ave, Suite B  
Cypress, CA 90630  
Attention: Cathy Sanford

Project ID: ARCO 0177, Los Angeles  
Report Number: IOK1736

Sampled: 11/17/05-11/18/05  
Received: 11/18/05

## METHOD BLANK/QC DATA

### BTEX/OXYGENATES by GC/MS (EPA 5035/8260B)

Analyte	Result	Reporting Limit	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Data Qualifiers
<b>Batch: 5K19015 Extracted: 11/19/05</b>											
<b>Matrix Spike Analyzed: 11/19/2005 (5K19015-MS1)</b>						<b>Source: IOK1503-03</b>					
Benzene	0.0649	0.0023	0.00056	mg/kg	0.0563	0.0010	113	65-130			LM,AY
Ethylbenzene	0.0754	0.0023	0.00057	mg/kg	0.0563	0.00071	133	70-130			
Toluene	0.0611	0.0023	0.0010	mg/kg	0.0563	0.0025	104	70-125			
o-Xylene	0.0708	0.0023	0.00053	mg/kg	0.0563	0.0010	124	70-125			
m,p-Xylenes	0.143	0.0023	0.00084	mg/kg	0.113	0.0025	124	70-125			
Xylenes, Total	0.214	0.0045	0.00084	mg/kg	0.169	0.0035	125	70-125			
Di-isopropyl Ether (DIPE)	0.0575	0.0056	0.00042	mg/kg	0.0563	ND	102	60-145			
Ethyl tert-Butyl Ether (ETBE)	0.0596	0.0056	0.00065	mg/kg	0.0563	ND	106	60-140			
tert-Amyl Methyl Ether (TAME)	0.0584	0.0056	0.00072	mg/kg	0.0563	ND	104	60-145			
Methyl-tert-butyl Ether (MTBE)	0.0616	0.0056	0.0011	mg/kg	0.0563	ND	109	55-150			
tert-Butanol (TBA)	0.325	0.056	0.0056	mg/kg	0.282	ND	115	65-140			
Ethanol	0.481	0.34	0.14	mg/kg	0.563	ND	85	25-160			
Surrogate: Dibromofluoromethane	0.0536			mg/kg	0.0563		95	80-125			
Surrogate: Toluene-d8	0.0547			mg/kg	0.0563		97	80-120			
Surrogate: 4-Bromofluorobenzene	0.0457			mg/kg	0.0563		81	80-120			
<b>Matrix Spike Dup Analyzed: 11/19/2005 (5K19015-MSD1)</b>						<b>Source: IOK1503-03</b>					
Benzene	0.0635	0.0022	0.00054	mg/kg	0.0543	0.0010	115	65-130	2	20	LM,AY
Ethylbenzene	0.0743	0.0022	0.00055	mg/kg	0.0543	0.00071	136	70-130	1	25	
Toluene	0.0585	0.0022	0.00099	mg/kg	0.0543	0.0025	103	70-125	4	20	
o-Xylene	0.0706	0.0022	0.00051	mg/kg	0.0543	0.0010	128	70-125	0	25	
m,p-Xylenes	0.140	0.0022	0.00082	mg/kg	0.109	0.0025	126	70-125	2	25	
Xylenes, Total	0.211	0.0043	0.00082	mg/kg	0.163	0.0035	127	70-125	1	25	LM,AY
Di-isopropyl Ether (DIPE)	0.0584	0.0054	0.00040	mg/kg	0.0543	ND	108	60-145	2	25	
Ethyl tert-Butyl Ether (ETBE)	0.0595	0.0054	0.00063	mg/kg	0.0543	ND	110	60-140	0	30	
tert-Amyl Methyl Ether (TAME)	0.0581	0.0054	0.00070	mg/kg	0.0543	ND	107	60-145	1	25	
Methyl-tert-butyl Ether (MTBE)	0.0677	0.0054	0.0011	mg/kg	0.0543	ND	125	55-150	9	35	
tert-Butanol (TBA)	0.332	0.054	0.0054	mg/kg	0.272	ND	122	65-140	2	30	
Ethanol	0.334	0.33	0.13	mg/kg	0.543	ND	62	25-160	36	40	
Surrogate: Dibromofluoromethane	0.0529			mg/kg	0.0543		97	80-125			
Surrogate: Toluene-d8	0.0525			mg/kg	0.0543		97	80-120			
Surrogate: 4-Bromofluorobenzene	0.0449			mg/kg	0.0543		83	80-120			

Del Mar Analytical, Irvine  
Lisa Reightley  
Project Manager

The results pertain only to the samples tested in the laboratory. This report shall not be reproduced, except in full, without written permission from Del Mar Analytical.

IOK1736 <Page 15 of 19>



SECOR International, Inc.-Orange County  
 11085 Knott Ave, Suite B  
 Cypress, CA 90630  
 Attention: Cathy Sanford

Project ID: ARCO 0177, Los Angeles  
 Report Number: IOK1736

Sampled: 11/17/05-11/18/05  
 Received: 11/18/05

## METHOD BLANK/QC DATA

### BTEX/OXYGENATES by GC/MS (EPA 5035/8260B)

Analyte	Result	Reporting Limit	MDL	Units	Spike Level	Source Result	%REC %REC Limits	RPD	RPD Limit	Data Qualifiers
<b>Batch: 5K20026 Extracted: 11/20/05</b>										
<b>Blank Analyzed: 11/20/2005 (5K20026-BLK1)</b>										
Benzene	ND	0.10	0.034	mg/kg						
Ethylbenzene	ND	0.10	0.027	mg/kg						
Toluene	ND	0.10	0.033	mg/kg						
o-Xylene	ND	0.10	0.028	mg/kg						
m,p-Xylenes	ND	0.10	0.053	mg/kg						
Xylenes, Total	ND	0.20	0.053	mg/kg						
Di-isopropyl Ether (DIPE)	ND	0.25	0.051	mg/kg						
Ethyl tert-Butyl Ether (ETBE)	ND	0.25	0.066	mg/kg						
tert-Amyl Methyl Ether (TAME)	ND	0.25	0.068	mg/kg						
Methyl-tert-butyl Ether (MTBE)	ND	0.25	0.062	mg/kg						
tert-Butanol (TBA)	ND	5.0	0.50	mg/kg						
Ethanol	16.4	15	10	mg/kg						MB
Surrogate: Dibromofluoromethane	2.24			mg/kg	2.50		90	55-140		
Surrogate: Toluene-d8	2.53			mg/kg	2.50		101	60-140		
Surrogate: 4-Bromofluorobenzene	2.42			mg/kg	2.50		97	65-140		
<b>LCS Analyzed: 11/20/2005 (5K20026-BS1)</b>										
Benzene	2.10	0.10	0.034	mg/kg	2.50		84	65-120		
Ethylbenzene	2.04	0.10	0.027	mg/kg	2.50		82	80-120		
Toluene	2.00	0.10	0.033	mg/kg	2.50		80	80-120		
o-Xylene	2.02	0.10	0.028	mg/kg	2.50		81	70-125		
m,p-Xylenes	4.06	0.10	0.053	mg/kg	5.00		81	70-125		
Xylenes, Total	6.09	0.20	0.053	mg/kg	7.50		81	70-125		
Di-isopropyl Ether (DIPE)	1.65	0.25	0.051	mg/kg	2.50		66	60-140		
Ethyl tert-Butyl Ether (ETBE)	1.62	0.25	0.066	mg/kg	2.50		65	60-140		
tert-Amyl Methyl Ether (TAME)	1.72	0.25	0.068	mg/kg	2.50		69	60-145		
Methyl-tert-butyl Ether (MTBE)	1.66	0.25	0.062	mg/kg	2.50		66	55-145		
tert-Butanol (TBA)	14.1	5.0	0.50	mg/kg	12.5		113	65-140		
Ethanol	34.6	15	10	mg/kg	25.0		138	35-160		
Surrogate: Dibromofluoromethane	2.20			mg/kg	2.50		88	55-140		
Surrogate: Toluene-d8	2.32			mg/kg	2.50		93	60-140		
Surrogate: 4-Bromofluorobenzene	2.40			mg/kg	2.50		96	65-140		

**Del Mar Analytical, Irvine**  
 Lisa Reightley  
 Project Manager



# Del Mar Analytical

17461 Derian Ave., Suite 100, Irvine, CA 92614 (949) 261-1022 FAX (949) 260-3297  
 1014 E. Cooley Dr., Suite A, Colton, CA 92324 (909) 370-4667 FAX (909) 370-1046  
 9484 Chesapeake Dr., Suite 805, San Diego, CA 92123 (858) 505-8596 FAX (858) 505-9689  
 9830 South 51st St., Suite B-120, Phoenix, AZ 85044 (480) 785-0043 FAX (480) 785-0851  
 2520 E. Sunset Rd. #3, Las Vegas, NV 89120 (702) 798-3620 FAX (702) 798-3621

SECOR International, Inc.-Orange County  
 11085 Knott Ave, Suite B  
 Cypress, CA 90630  
 Attention: Cathy Sanford

Project ID: ARCO 0177, Los Angeles  
 Report Number: IOK1736

Sampled: 11/17/05-11/18/05  
 Received: 11/18/05

## METHOD BLANK/QC DATA

### BTEX/OXYGENATES by GC/MS (EPA 5035/8260B)

Analyte	Result	Reporting Limit	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Data Qualifiers
<b>Batch: 5K20026 Extracted: 11/20/05</b>											
<b>LCS Dup Analyzed: 11/20/2005 (5K20026-BSD1)</b>											<b>DU</b>
Benzene	2.17	0.10	0.034	mg/kg	2.50		87	65-120	3	20	
Ethylbenzene	2.11	0.10	0.027	mg/kg	2.50		84	80-120	3	20	
Toluene	2.08	0.10	0.033	mg/kg	2.50		83	80-120	4	20	
o-Xylene	2.09	0.10	0.028	mg/kg	2.50		84	70-125	3	20	
m,p-Xylenes	4.22	0.10	0.053	mg/kg	5.00		84	70-125	4	20	
Xylenes, Total	6.31	0.20	0.053	mg/kg	7.50		84	70-125	4	20	
Di-isopropyl Ether (DIPE)	1.78	0.25	0.051	mg/kg	2.50		71	60-140	8	20	
Ethyl tert-Butyl Ether (ETBE)	1.80	0.25	0.066	mg/kg	2.50		72	60-140	11	20	
tert-Amyl Methyl Ether (TAME)	1.91	0.25	0.068	mg/kg	2.50		76	60-145	10	25	
Methyl-tert-butyl Ether (MTBE)	1.83	0.25	0.062	mg/kg	2.50		73	55-145	10	25	
tert-Butanol (TBA)	14.3	5.0	0.50	mg/kg	12.5		114	65-140	1	20	
Ethanol	33.4	15	10	mg/kg	25.0		134	35-160	4	30	
Surrogate: Dibromofluoromethane	2.32			mg/kg	2.50		93	55-140			
Surrogate: Toluene-d8	2.41			mg/kg	2.50		96	60-140			
Surrogate: 4-Bromofluorobenzene	2.45			mg/kg	2.50		98	65-140			

Del Mar Analytical, Irvine  
 Lisa Reightley  
 Project Manager

The results pertain only to the samples tested in the laboratory. This report shall not be reproduced, except in full, without written permission from Del Mar Analytical.

IOK1736 <Page 17 of 19>



SECOR International, Inc.-Orange County  
11085 Knott Ave, Suite B  
Cypress, CA 90630  
Attention: Cathy Sanford

Project ID: ARCO 0177, Los Angeles  
Report Number: IOK1736

Sampled: 11/17/05-11/18/05  
Received: 11/18/05

## DATA QUALIFIERS AND DEFINITIONS

<b>AZ</b>	Surr. recovery outside of acceptance limits due to matrix interf.
<b>DU</b>	Insufficient sample quantity for matrix spike/dup matrix spike
<b>IO</b>	Contract limits originate from BP-GCLN Technical Requirements
<b>J,DX</b>	EPA Flag - Estimated value, Value < lowest standard (MQL), but > than MDL
<b>LM,AY</b>	The MS and/or MSD were above the acceptance limits due to sample matrix interference. See Blank Spike (LCS).
<b>MB</b>	Analyte present in the method blank
<b>ND</b>	Analyte NOT DETECTED at or above the reporting limit or MDL, if MDL is specified.
<b>RPD</b>	Relative Percent Difference

## ADDITIONAL COMMENTS

### For 8260 analyses:

Due to the high water solubility of alcohols and ketones, the calibration criteria for these compounds is <30% RSD.  
The average % RSD of all compounds in the calibration is 15%, in accordance with EPA methods.

### For GRO (C4-C12):

GRO (C4-C12) is quantitated against a gasoline standard. Quantitation begins immediately following the methanol peak.

## 8015 Analysis EDF Parlabel Cross Reference

Analyte	EDF Parlabel
GRO (C4 - C12)	GROC4C12

Del Mar Analytical, Irvine  
Lisa Reightley  
Project Manager



SECOR International, Inc.-Orange County  
11085 Knott Ave, Suite B  
Cypress, CA 90630  
Attention: Cathy Sanford

Project ID: ARCO 0177, Los Angeles

Report Number: IOK1736

Sampled: 11/17/05-11/18/05  
Received: 11/18/05

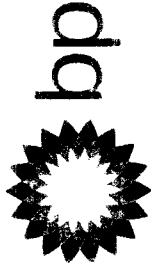
## Certification Summary

### Del Mar Analytical, Irvine

Method	Matrix	Nelac	California
EPA 418.1	Soil	X	X
EPA 5035	Soil		
EPA 8015B	Soil	X	X
EPA 8015B	Soil-extr	X	X
EPA 8015B	Water	X	X
EPA 8260B	Soil	X	X
EPA 8260B	Soil-extr	X	X
EPA 8260B	Water	X	X

*Nevada and NELAP provide analyte specific accreditations. Analyte specific information for Del Mar Analytical may be obtained by contacting the laboratory or visiting our website at [www.dmalabs.com](http://www.dmalabs.com).*

**Del Mar Analytical, Irvine**  
Lisa Reightley  
Project Manager



# Chain of Custody Record

Project Name: West End 1111 Remixed  
BP BU/AR Region/Entos Segment: San Diego sub-segment/Relief  
State or Lead Regulatory Agency: LOS Angeles City and County  
Requested Due Date (mm/dd/yy): ASAP

11/21/05 b-710441

Lab Name: <u>Del Mar Analytical</u>	BP/AR Facility No.: <u>Former 177</u>	Consultant/Contractor: <u>SECON Laboratory</u>
Address: <u>17461 Duran Ave, Ste 100</u>	BP/AR Facility Address: <u>4371 Cinnamon Bl</u>	Address: <u>11055 North Ave Ste B</u>
Lab POC: <u>Sharon C. Galt</u>	Site Lat/Long: <u>37.65434</u>	City/State: <u>Carlsbad CA 92008</u>
Tele/Fax: <u>(949) 261-1022</u>	Enfos Project No.: <u>60066-0001</u>	Consultant/Contractor Project No.: <u>KB 00177.10</u>
BP/AR PM Contact: <u>Roy Thoma</u>	Provision or RCOP (circle one): <u>RCOP</u>	Consultant/Contractor PM: <u>(714) 379 3364</u>
Address: <u>4 Centerpointe Drive</u>	Phase/WBS: <u>Phase 2</u>	Tele/Fax: <u></u>
City/State: <u>San Diego CA</u>	Sub Phase/Task: <u>0222</u>	Report Type & QC Level: <u></u>
Tele/Fax: <u>(619) 287 3855</u>	Cost Element: <u>sub contract cost</u>	E-mail EDD To: <u>baichard@secon.com</u>
Lab Bottle Order No: <u></u>		Invoice to: Consultant or BP of Atlantic Richfield Co. (circle one)

Lab Bottle Order No: 5084207										Requested Analysis					Sample Point Lat/Long and Comments				
Item No.	Sample Description	Time	Date	Matrix		Laboratory No.	No. of Containers	Preservative					BTEX/TPH						
				Soil/Solid	Water/Liquid			Air	Unpreserved	H <sub>2</sub> SO <sub>4</sub>	HNO <sub>3</sub>	HCl	Methanol	BTEX/TPH 8021	BTEX/TPH 8015	BTEX/Oxy/TPH	EPA 8260 8270		
1	W01-7.5	10:55	11/18/05			70K1736	8							X	X	X	X	48.1 TPH	
2	W02-10	11:10	11/18/05				8							X	X	X	X		
3	SP-2	11:30	11/18/05				1							X	X	X	X		
4	SP-1	10:45	11/18/05				1							X	X	X	X		maybe water
5	TB																		
6																			
7																			
8																			
9																			
10	TB 0177-20051118						3							X	X	X	X		
Sampler's Name: GABE TOU MA				Relinquished By / Affiliation						Time		Accepted By / Affiliation		Date		Time			
Sampler's Company: SECOR INTERNATIONAL				Tou Ma						11/18/05 12:00		C. Yang / 15602		11/18/05 12:00					
Shipment Date: 11/18/05				Cathy Yang / 15602						11/18/05 13:13		C. Yang / 15602		11/18/05 13:13					
Shipment Method: hand				D. G. on return						11/18/05 13:50		C. Yang / 15602		11/18/05 13:50					
Shipment Tracking No:																			

Sampler's Name: <u>GABE TOOMA</u>	Relinquished By / Affiliation: <u>Relinquished</u>	Date: <u>11/18/05</u>	Time: <u>12:00</u>
Sampler's Company: <u>SECON LABORATORY</u>	Relinquished By / Affiliation: <u>Relinquished</u>	Date: <u>11/18/05</u>	Time: <u>13:13</u>
Shipment Date: <u>11/18/05</u>	Relinquished By / Affiliation: <u>Relinquished</u>	Date: <u>11/18/05</u>	Time: <u>13:50</u>
Shipment Method: <u>hand</u>	Relinquished By / Affiliation: <u>Relinquished</u>	Date: <u>11/18/05</u>	Time: <u>13:50</u>
Shipment Tracking No: <u></u>	Relinquished By / Affiliation: <u>Relinquished</u>	Date: <u>11/18/05</u>	Time: <u>13:50</u>
Special Instructions: <u></u>			
Custody Seals In Place Yes <u>No</u>	Temp Blank Yes <u>No</u>	Cooler Temperature on Receipt <u>50°F</u>	Trip Blank Yes <u>No</u>

## **APPENDIX G**

### **UNAUTHORIZED RELEASE REPORT**





BP West Coast Products LLC  
4 Centerpointe Drive  
La Palma, CA 90623-1066

Mailing Address:  
PO Box 6038  
Artesia, CA 90702-6038

Voice (714) 670-3928  
Fax (714) 670-5420  
Email [deraax@bp.com](mailto:deraax@bp.com)

January 5, 2006

VIA FACSIMILIE

Los Angeles City Fire Department  
City Hall East  
200 N. Main Street  
Los Angeles, CA 90012

Attention: Marcus Look

RE: Former Arco Facility No. 00177  
4371 Crenshaw Blvd.  
Los Angeles, CA 90008

Dear Mr. Look,

Attached is an Underground Storage Tank Unauthorized Release Report in connection with an incident at the facility noted above. Please note that BP West Coast Products no longer operates this facility. Please feel free to call me at (714) 670-3928 with any questions.

Sincerely,

A handwritten signature in black ink, appearing to read 'Aline Der Alexanian'.

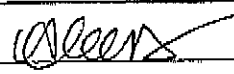
Aline Der Alexanian  
Environmental Compliance Specialist  
U.S. Convenience Retail Business

AD/cc

cc: Los Angeles Regional Water Quality Control Board (4)  
Cathy Sanford (SECOR)  
Jack Oman  
File

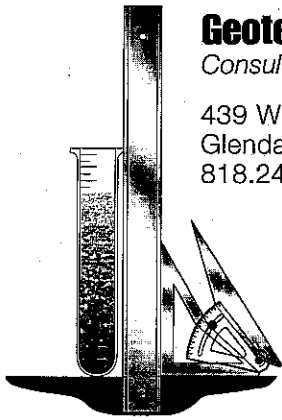
DISCLAIMER: This message (including attachments, if any) contains confidential proprietary information, some or all of which may be legally privileged or otherwise protected from unauthorized use, disclosure, distribution or copying. It is for the intended recipient only. If you are not the intended recipient, you may not use, disclose, distribute, copy, print or retain this message or any part of it. If you have received this message in error, please notify us immediately by calling (714) 670-5336 collect.

# UNDERGROUND STORAGE TANK UNAUTHORIZED RELEASE (LEAK) / CONTAMINATION SITE REPORT

<b>EMERGENCY</b> <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO		HAS STATE OFFICE OF EMERGENCY SERVICES REPORT BEEN FILED? <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO		<b>FOR LOCAL AGENCY USE ONLY:</b> (HEREBY CERTIFY THAT I HAVE DISTRIBUTED THIS INFORMATION ACCORDING TO THE DISTRIBUTION SHOWN ON THE INSTRUCTION SHEET ON THE BACK PAGE OF THIS FORM)	
<b>REPORT DATE</b> 0 1 0 5 0 6		<b>CASE #</b>		<b>SIGNED</b> _____ <b>DATE</b> _____	
REPORTED BY	<b>NAME OF INDIVIDUAL FILING REPORT</b> Aline Der Alexanian		<b>PHONE</b> 714-670-3928		<b>SIGNATURE</b> 
	REPRESENTING <input checked="" type="checkbox"/> OWNER/OPERATOR <input type="checkbox"/> REGIONAL BOARD <input type="checkbox"/> LOCAL AGENCY <input type="checkbox"/> OTHER		<b>COMPANY OR AGENCY NAME</b> BP West Coast Products LLC		
	<b>ADDRESS</b> 4 Centerpointe Drive La Palma CA 90623 STREET CITY STATE ZIP				
RESPONSIBLE PARTY	<b>NAME</b> BP West Coast Products LLC <input type="checkbox"/> UNKNOWN		<b>CONTACT PERSON</b> Aline Der Alexanian		<b>PHONE</b> 714-670-3928
	<b>ADDRESS</b> 4 Centerpointe Drive La Palma CA 90623 STREET CITY STATE ZIP				
SITE LOCATION	<b>FACILITY NAME (IF APPLICABLE)</b> Former Arco Facility No. 00177		<b>OPERATOR</b>		<b>PHONE</b>
	<b>ADDRESS</b> 4371 Crenshaw Blvd. Los Angeles CA 90008 STREET CITY COUNTY ZIP		<b>CROSS STREET</b> Vernon		
	<b>LOCAL AGENCY AGENCY NAME</b> Los Angeles City Fire Department				
IMPLEMENTING AGENCIES	<b>CONTACT PERSON</b> Marcus Look		<b>PHONE</b> 213-485-8327		
	<b>REGIONAL BOARD</b> Los Angeles Regional Water Quality Control Board (4)		<b>PHONE</b> 213-576-6600		
SUBSTANCES INVOLVED	(1) NAME QUANTITY LOST (GALLONS) <input checked="" type="checkbox"/> UNKNOWN				
	(2) <input type="checkbox"/> UNKNOWN				
DISCOVERY/ABATEMENT	<b>DATE DISCOVERED</b> 1 1 2 2 0 5		<b>HOW DISCOVERED</b> <input type="checkbox"/> TANK TEST <input type="checkbox"/> TANK REMOVAL <input type="checkbox"/> INVENTORY CONTROL <input type="checkbox"/> SUBSURFACE MONITORING <input type="checkbox"/> NUISANCE CONDITIONS <input checked="" type="checkbox"/> OTHER Redevelopment of site		
	<b>DATE DISCHARGE BEGAN</b> <input type="checkbox"/> UNKNOWN		<b>METHOD USED TO STOP DISCHARGE (CHECK ALL THAT APPLY)</b> <input type="checkbox"/> REMOVE CONTENTS <input type="checkbox"/> CLOSE TANK & REMOVE <input type="checkbox"/> REPAIR PIPING <input type="checkbox"/> REPAIR TANK <input type="checkbox"/> CLOSE TANK & FILL IN PLACE <input type="checkbox"/> CHANGE PROCEDURE <input type="checkbox"/> REPLACE TANK <input checked="" type="checkbox"/> OTHER Source removal		
	<b>HAS DISCHARGE BEEN STOPPED?</b> <input type="checkbox"/> YES <input type="checkbox"/> NO IF YES DATE _____				
	<b>SOURCE OF DISCHARGE</b> <input type="checkbox"/> TANK LEAK <input checked="" type="checkbox"/> UNKNOWN <input type="checkbox"/> PIPING LEAK <input type="checkbox"/> OTHER				
CASE TYPE	<b>CHECK ONLY ONE</b> <input type="checkbox"/> UNDETERMINED <input checked="" type="checkbox"/> SOIL ONLY <input type="checkbox"/> GROUNDWATER <input type="checkbox"/> DRINKING WATER - (CHECK ONLY IF WATER WELLS HAVE ACTUALLY BEEN AFFECTED)				
	<b>CHECK ONLY ONE</b> <input type="checkbox"/> NO ACTION TAKEN <input type="checkbox"/> PRELIMINARY SITE ASSESSMENT WORKPLAN SUBMITTED <input checked="" type="checkbox"/> POLLUTION CHARACTERIZATION <input type="checkbox"/> LEAK BEING CONFIRMED <input type="checkbox"/> PRELIMINARY SITE ASSESSMENT UNDERWAY <input type="checkbox"/> POST CLEANUP MONITORING IN PROGRESS <input type="checkbox"/> REMEDIATION PLAN <input type="checkbox"/> CASE CLOSED (CLEANUP COMPLETED OR UNNECESSARY) <input type="checkbox"/> CLEANUP UNDERWAY				
REMEDIAL ACTION	<b>CHECK APPROPRIATE ACTION(S)</b> <input type="checkbox"/> EXCAVATE & DISPOSE (ED) <input type="checkbox"/> REMOVE FREE PRODUCT (FP) <input type="checkbox"/> ENHANCED BIO DEGRADATION (IT) <input type="checkbox"/> CAP SITE (CD) <input type="checkbox"/> EXCAVATE & TREAT (ET) <input type="checkbox"/> PUMP & TREAT GROUNDWATER (GR) <input type="checkbox"/> REPLACE SUPPLY (RS) <input type="checkbox"/> CONTAINMENT BARRIER (CB) <input type="checkbox"/> NO ACTION REQUIRED (NA) <input type="checkbox"/> TREATMENT AT HOOKUP (HU) <input type="checkbox"/> VENT SOIL (VS) <input type="checkbox"/> VACUUM EXTRACT (VE) <input checked="" type="checkbox"/> OTHER UST source removal and soil over-excavation				
	<b>COMMENTS</b> Soil sample collected are as follows: Max. TRPH 1,700 mg/kg (stockpile sample SP-2), Max. Benzene 0.14 mg/kg (stockpile sample SP-2), Max. MTBE ND and Max. Ethanol ND.				

## **APPENDIX H**

### **BACKFILL AND COMPACTION FIELD DATA**



**Geotechnologies, Inc.**  
Consulting Geotechnical Engineers

439 Western Avenue  
Glendale, California 91201-2837  
818.240.9600 • Fax 818.240.9675

# NOTICE OF FIELD OBSERVATION

FILE NO: 18487

DATE: 11-22-05 TIME: ALL DAY TECH: Benk

PRELIMINARY REPORTS: GAI

SITE ADDRESS: 4371 Crenshaw BLVD, Los Angeles

CLIENT: Festival Development

REQUESTED BY: Kathy Sanford TITLE: project manager

MET WITH: paul Bunch with Secor TITLE: Senior tech

NOTICE LEFT WITH: paul Bunch <sup>INT</sup> TITLE: u u

SPECIAL CONDITIONS: Clear

(WEATHER; JOB SHUTDOWN; ADVICE IGNORED; SAFETY)

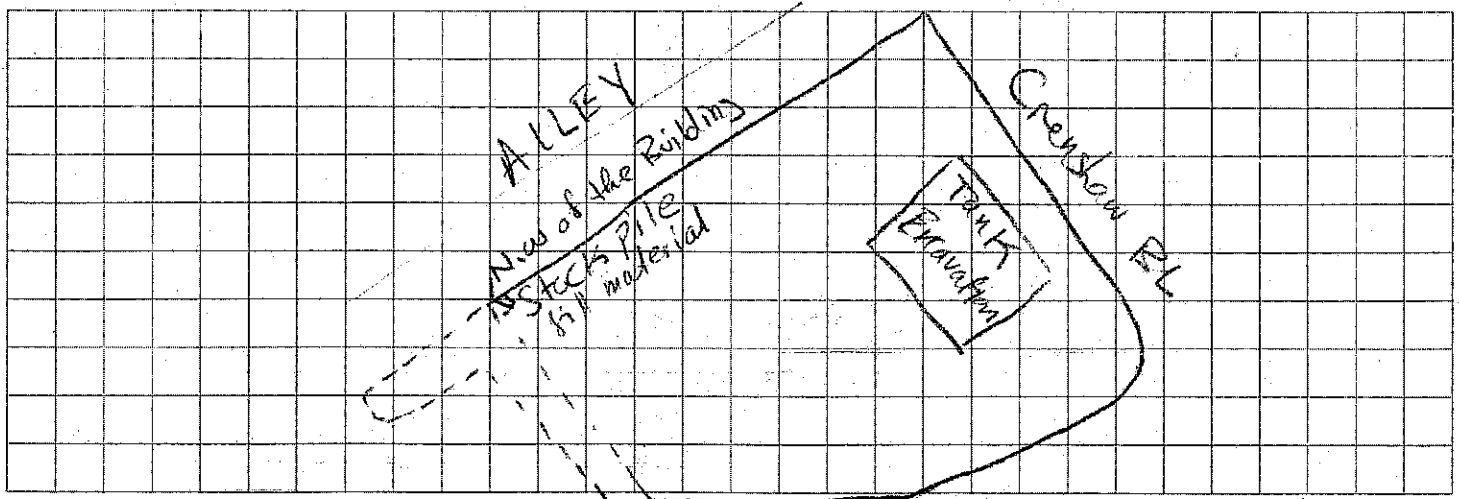
THE Removal and Backfill tank excavation HAVE BEEN OBSERVED AND ARE:

☒ APPROVED PER PLANS

☐ NOT APPROVED

☒ SEE BELOW

COMMENTS AND OBSERVATIONS: fill material was placed at the middle  
of the lot, using stock pile material and a 310 loader  
parking  
wheel rolling plus a Compactor to minimum of 90%  
of the Max density.



CLIENT/REPRESENTATIVE SIGNATURE

Paul Bunch

ADDITIONAL SITE VISIT REQUIRED: ☒ YES ☐ NO

8 HOURS  
(2-HOUR MINIMUM CHARGE)